



“THIS IS WHAT WE DIE FOR”

HUMAN RIGHTS ABUSES IN THE DEMOCRATIC REPUBLIC
OF THE CONGO POWER THE GLOBAL TRADE IN COBALT



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Cover photo: Charles, 13 years old, works with his father in the afternoons and goes to school in the morning when he has the money. Charles sorts and washes the minerals, before helping to transport them to a nearby trading house, which buys the ore, May 2015. © Amnesty International and Afrewatch

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EXECUTIVE SUMMARY

People around the world increasingly rely on rechargeable batteries to power their mobile phones, tablets, laptop computers and other portable electronic devices. The growing global market for portable electronic devices and rechargeable batteries is driving the growing demand for the extraction of cobalt, a key component in lithium-ion rechargeable batteries.

More than half of the world's total supply of cobalt comes from the Democratic Republic of the Congo (DRC). According to the government's own estimates, 20% of the cobalt currently exported from the DRC comes from artisanal miners in the southern part of the country. There are approximately 110,000 to 150,000 artisanal miners in this region, who work alongside much larger industrial operations.

These artisanal miners, referred to as *creuseurs* in the DRC, mine by hand using the most basic tools to dig out rocks from tunnels deep underground. Artisanal miners include children as young as seven who scavenge for rocks containing cobalt in the discarded by-products of industrial mines, and who wash and sort the ore before it is sold.

This report, jointly researched by Amnesty International and African Resources Watch (Afresource), examines the conditions under which artisanal miners extract a significant proportion of the world's cobalt supply, and then traces how this mineral is traded. It is the first comprehensive account of how cobalt from the DRC's artisanal mines enters the supply chain of multinational companies, including some of the world's wealthiest electronics companies. The report assesses the extent to which companies have put in place human rights due diligence measures to know where the cobalt in their products comes from and the conditions under which it is extracted and traded.



Charles, 13 years old, goes to school in the mornings, when his father can afford it. Every afternoon he sorts and washes the minerals, before helping to transport them to a nearby trading house, May 2015. (Still taken from footage shot by Amnesty International). © Amnesty International and Afresource

THE RISE OF ARTISANAL MINING IN SOUTHERN DRC

The DRC is one of the poorest countries in the world and has suffered from decades of war and poor governance. Artisanal mining became a source of livelihood for many people when the largest state owned mining company collapsed in the 1990s. It grew further during the Second Congo War (1998 – 2003), when President Laurent Kabila encouraged people to dig for themselves as the government could not revive industrial mining.

In 2002, the government published a new mining code in an attempt to revive the mining sector and attract foreign investment. The Mining Code established that artisanal mining can only take place within authorized *Zones d'exploitation artisanale* (Artisanal Mining Zones or ZEAs) where industrial or semi-industrial mining is not viable. Artisanal miners were driven out of many mining sites which were made available to major western and Chinese companies. However, as the government has created very few ZEAs in southern DRC, most artisanal miners end up working in unauthorized and unregulated areas or trespassing on land controlled by industrial mining companies.

Artisanal miners in the DRC work in a range of different ways and locations to mine cobalt. In some places, the miners dig deep underground to access the ore. These miners, who are mainly adult men work underground in tunnels and use chisels, mallets and other hand tools. In other places, miners, including many children, dig for cobalt in the discarded tailings (by-products such as rocks left over from mining and refining processes) of the region's many industrial mines. They collect rocks containing minerals that lie on or near the surface, most often without the companies' permission. The stones they pick are then washed, sifted and sorted in streams and lakes close to the mines. Generally, women and children are involved in washing and sorting the ore.

The way these artisanal mining operations are managed and organised varies from site to site. For

example, the adults and children who handpick stones on or near the surface of industrial mining concessions work for themselves. They sell the ore to traders or intermediaries. By contrast, some miners who dig underground do so as hired labourers, earning a fee from the owner of the land where they work, while others work in teams or share their earnings with mine owners. Some miners also have a business arrangement with an investor, who funds the digging of the tunnel and manages the sale of the product.

HUMAN RIGHTS ABUSES IN ARTISANAL COBALT MINES

Amnesty International and Afrewatch conducted research in artisanal mining areas in southern DRC in April and May 2015, visiting five mine sites. They interviewed nearly 90 people who work, or who have worked, in the mines, including 17 children.

Chronic exposure to dust containing cobalt can result in a potentially fatal lung disease, called "hard metal lung disease." Inhalation of cobalt particles can also cause "respiratory sensitization, asthma, shortness of breath, and decreased pulmonary function", and sustained skin contact with cobalt can lead to dermatitis. Yet researchers found that the vast majority of miners, who spend long hours every day working with cobalt, do not have the most basic of protective equipment, such as gloves, work clothes or facemasks. The DRC Mining Code (2002) and Regulations (2003) provide no guidance for artisanal miners on safety equipment or how to handle substances which may pose a danger to human health, apart from mercury.

Many of the miners complained that they coughed a lot or had problems with their lungs. Researchers also spoke to women who complained of respiratory problems and pain as a result of carrying heavy loads and the physically demanding nature of the work. For example, one woman described having to carry 50 kg sacks of cobalt ore and told researchers: "We all have problems with our lungs, and pain all over our bodies."

Artisanal miners work in mines which they dig themselves. Hand-dug mines can extend for tens of metres underground, often without any support to hold them up, and are poorly ventilated. There is no official data available on the number of fatalities that occur, but miners said accidents are common, as unsupported tunnels collapse frequently. Between September 2014 and December 2015 alone, the DRC's UN-run radio station, Radio Okapi, carried reports of fatal accidents involving more than 80 artisanal miners in the former province of Katanga. However, the true figure is likely to be far higher as many accidents go unrecorded and bodies are left buried underground.

UNICEF estimated in 2014 that approximately 40,000 boys and girls work in all the mines across southern DRC, many of them involved in cobalt mining. The children interviewed by researchers described the physically demanding nature of the work they did. They said that they worked for up to 12 hours a day in the mines, carrying heavy loads, to earn between one and two dollars a day. Even those children who went to school worked 10 – 12 hours during the weekend and school holidays, and in the time before and after school. The children who were not attending school worked in the mines all year round. For example, Paul, aged 14, started mining at the age of 12 and worked in tunnels underground. He told researchers he would often "spend 24 hours down in the tunnels. I arrived in the morning and would leave the following morning."

Other children said that they worked in the open, in high temperatures, or in the rain. As with adult miners, they were exposed to high levels of cobalt on a consistent basis, but did not even have gloves or face masks to wear. The children interviewed for this report complained of being frequently ill. "There is lots of dust, it is very easy to catch colds, and we hurt all over," Dany, a 15-year-old boy, told researchers.

Several children said that they had been beaten, or seen other children beaten, by security guards employed by mining companies when they trespassed on those companies' mining concessions. Security guards also demanded money from them.

Most children indicated that they earned between 1,000-2,000 Congolese Francs per day (US\$1-2). Children who collected, sorted, washed, crushed and transported minerals were paid per sack of minerals by the traders. The children had no way of independently verifying the weight of the sacks or the grade of the ore, and so had to accept what the traders paid them, making them susceptible to exploitation.

It is widely recognized internationally that the involvement of children in mining constitutes one of the worst forms of child labour, which governments are required to prohibit and eliminate. The nature of the work that researchers found that the children do in artisanal cobalt mining in the DRC is hazardous, and likely to harm children's health and safety.

The children said that they had to work, since their parents had no formal employment and could not afford school fees. The DRC Child Protection Code (2009), provides for free and compulsory primary education for all children. However, because of a lack of adequate funding from the state, most schools still charge parents a monthly amount to cover costs, such as teacher salaries, uniforms and learning materials. In Kolwezi, NGO staff told researchers, this amount varies between 10 - 30,000 Congolese Francs (US\$10-30) per month, which is more than many can afford. Some children do not attend school and work full time, others attend school but work out of school hours, on weekends and holidays.



Miners use chisels, mallets and other hand tools to mine for cobalt ore tens of metres under the ground in Kasulo, a residential neighbourhood of Kolwezi, May 2015. (Still taken from footage shot by a miner using a GoPro camera for Amnesty International) © Amnesty International and Afrewatch

DRC’S FAILURE TO PROTECT PEOPLE FROM HUMAN RIGHTS ABUSES

There are significant gaps and weaknesses in the government’s regulation of artisanal mining. The Mining Code and Regulations contain limited guidance on health and safety and very few provisions to protect artisanal miners’ labour rights.

There is a significant lack of capacity within governmental agencies to monitor and enforce safeguards and improve conditions for artisanal miners. The Ministry of Labour is responsible for ensuring effective implementation of the DRC Labour Code, including inspecting worksites for child labour and ensuring that they abide by health and safety rules. However in 2014, the Ministry only employed 20 inspectors for the entire mining region of southern DRC. The government has been criticised by UN human rights monitoring bodies, ILO expert bodies,

NGOs and others for its failure to put in place an adequate labour inspection system, to remove children from the worst forms of child labour, and to prioritize primary school enrolment. In 2011, the DRC developed a national action plan to eliminate the worst forms of child labour by 2020, but four years later the plan is yet to be officially adopted.

The Service d’Assistance et d’Encadrement du Small Scale Mining (SAESSCAM), the governmental agency created in 1999 to regulate artisanal mining and improve conditions for artisanal miners, only operates in ZEAs (authorized artisanal mining areas). Even government officials interviewed for this report acknowledged that there were not enough ZEAs to accommodate the number of artisanal miners in southern DRC. The vast majority of artisanal mining therefore takes places in unauthorized mining areas, where the government is doing next to nothing to regulate the safety and labour conditions in which the miners work.



Artisanal miners hold up handfuls of cobalt ore (left) and copper ore (right) that they have scavenged from the mounds of tailings from active and inactive industrial mine sites near Lake Malo, Kapata on the outskirts of Kolwezi, in the DRC. The miners must then sort, wash and crush the mineral ore before selling it to buying houses, May 2015. © Amnesty International and Afrewatch

Not only are state officials aware of the mining activities taking place in unauthorized locations, but they also financially benefit from them. Officials from a range of different government and security agencies control access to unauthorized mining sites and demand illegal payments from artisanal miners. During their visits, researchers saw officials wearing uniforms and others who identified themselves as working for governmental agencies at three unauthorized mining sites. In Kasulo, they saw uniformed police and were approached by two men out of uniform, and one in uniform, who said that they were members of the mines police. These men told the researchers to leave the area as foreigners were not allowed to visit mines sites without official permission, and demanded that the researchers pay a fine. Artisanal miners at these and other sites complained that the mines police and other officials demand payments from them for each sack of ore or to work on the site.

A Ministry of Mines official confirmed to researchers that none of these agencies are authorized to collect payments (referred to in the mining areas as “taxes”) from artisanal miners. The evidence suggests that the state officials are extorting illegal payments from artisanal miners, while turning a blind eye to the unsafe conditions in which miners work that breach DRC’s own laws, including the prohibition on child labour in mines.

THE GLOBAL COBALT SUPPLY CHAIN

Researchers followed vehicles of miners and traders as they carried cobalt ore from artisanal mines in Kolwezi to a market at Musompo, where minerals are traded. Independent traders at Musompo – most of them Chinese – buy the ore, regardless of where it has come from or how it has been mined. In turn, these traders sell the ore on to larger companies in the DRC which process and export it. One of the largest companies at the centre of this trade is Congo Dongfang Mining International (CDM). CDM is a 100% owned subsidiary of China-based Zhejiang Huayou Cobalt Company Ltd (Huayou Cobalt), one of

the world’s largest manufacturers of cobalt products. Operating in the DRC since 2006, CDM buys cobalt from traders, who buy directly from the miners. CDM then smelts the ore at its plant in the DRC before exporting it to China. There, Huayou Cobalt further smelts and sells the processed cobalt to battery component manufacturers in China and South Korea. In turn, these companies sell to battery manufacturers, which then sell on to well-known consumer brands.

Using public records, including investor documents and statements published on company websites, researchers identified battery component manufacturers who were listed as sourcing processed ore from Huayou Cobalt. They then went on to trace companies who were listed as customers of the battery component manufacturers, in order to establish how the cobalt ends up in consumer products. In seeking to understand how this international supply chain works, as well as to ask questions about each company’s due diligence policy, Amnesty International wrote to Huayou Cobalt and 25 other companies in China, Germany, Japan, South Korea, Taiwan, UK, and the USA. These companies include some of the world’s largest and



About 100 people, mainly women, many with babies and infants, were working in the waters and on the shore of Lake Malo, Kapata, when researchers visited. One woman said that she washed eight to twelve sacks of 50 kg per day, for which she earned 1,500 Congolese francs (around US\$1.50), May 2015. © Amnesty International and Afrewatch

best known consumer electronics companies, including Apple Inc., Dell, HP Inc. (formerly Hewlett-Packard Company), Huawei, Lenovo (Motorola), LG, Microsoft Corporation, Samsung, Sony and Vodafone, as well as vehicle manufacturers like Daimler AG, Volkswagen and Chinese firm BYD. Their replies are detailed in the report's Annex.

COMPANIES' FAILURE TO MEET INTERNATIONAL DUE DILIGENCE STANDARDS

The UN Guiding Principles on Business and Human Rights set out the responsibility of companies to respect international human rights in their global operations, including in their supply chains. This requires, amongst other things, that companies carry out human rights due diligence "to identify, prevent, mitigate and account for how they address their impacts on human rights."

A practical guide for how such due diligence should be carried out for supply chains has been provided by the Organisation for Economic Co-operation and Development (OECD). Its Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance), lays out a five step process for all companies involved in the mineral supply chain to follow. Companies that purchase cobalt, or components containing the mineral, have no excuse for not conducting such due diligence steps. The DRC is by far the world's largest source of cobalt, and the poor conditions of its artisanal mines, and the presence of children working in them, has been reported publicly in the past.

Research for this report demonstrates that companies along the cobalt supply chain are failing to conduct adequate human rights due diligence. As the smelter, CDM and Huayou Cobalt are at a critical point in the supply chain and are expected to know how the cobalt that they buy is extracted, handled, transported and traded. They should be able to identify where it is mined, by whom and under what conditions

(including whether human rights abuses or any form of illegality are taking place). Amnesty International and Afreewatch conclude from Huayou Cobalt's response that it was failing to take these crucial steps and carry out due diligence in line with the OECD Guidance, which has been accepted by the Chinese Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters. It is failing to respect human rights and there is a high risk that Huayou Cobalt is buying (and subsequently selling) cobalt from artisanal mines in which children and adults work in hazardous conditions.

Any company which sources processed ore, and its customers along the supply chain, referred to as "downstream" companies, should be able to trace its suppliers up to the smelters (such as CDM and Huayou Cobalt), and should be fully aware of the due diligence practices of the smelter company. In their letters to Amnesty International, most of these downstream companies referred to general codes of conduct and internal policies, which require suppliers to respect human rights and not employ children. Many of these companies stated that they have a zero tolerance policy when it comes to child labour in their supply chains. However, they did not provide details of specific investigations and checks that they have undertaken to identify and address child labour in their cobalt supply chains. None of the companies said that they had been in touch with Huayou Cobalt, prior to receiving our letter.

Many companies denied sourcing cobalt from the DRC and/or Huayou Cobalt – though they are listed as customers in documents of other companies who are listed as buying from Huayou Cobalt – but did not explain whom they sourced cobalt from. Considering the predominance of cobalt from the DRC in the global market, it is unlikely that all these large companies are not sourcing any cobalt from the DRC. Downstream companies should already be publicly disclosing who their smelters are, as well as their due diligence practices. However, none provided enough detail for Amnesty International to be able to verify their cobalt supply chain or whether they were undertaking all five steps of the OECD Guidance in relation to cobalt.

Most of the consumer brands identified in Huayou Cobalt's supply chain have a global presence. For them, supply chain due diligence requirements for all minerals – as laid out by the OECD Guidance – are not new. Additionally, many of them are US-listed companies subject to reporting requirements under the Dodd-Frank Act, which requires them to check whether certain minerals in their products (tin, tantalum, tungsten and gold) are contributing to the funding of armed groups or fuelling human rights abuses in the DRC or surrounding countries. Yet it is clear that these companies are currently failing to operationalise the OECD's five step due diligence process beyond whatever measures they have put in place for 3T and gold. One company explicitly admitted and others implied that this is because cobalt is not covered under US legislation, clearly underscoring the value of law in influencing corporate behaviour.

CONCLUSIONS

The research in this report exposes a clear gap when it comes to home states (the countries where multinational companies are headquartered), such as China, US, South Korea and many others, playing a meaningful role and requiring greater transparency around cobalt supply chain practices. Currently, no country legally requires companies to publicly report on their cobalt supply chains.

Under international human rights law, states have a duty to protect against human rights abuses by all actors, including businesses. This requires all governments to enact and enforce laws requiring corporate due diligence and public disclosure in relation to cobalt and other minerals.

The government of the DRC should create more ZEAs and regularise unauthorized mining areas, wherever this is possible. It should extend and enforce labour and safety protections, and provide support in realising these protections, to all artisanal miners. It urgently needs to put in place an adequate system to monitor and enforce the labour standards that exist, including on the worst forms of child labour. The government must also ensure that all children are able to access free and compulsory primary education and provide support, as necessary, to reintegrate children who have been removed from the worst forms of child labour into the school system.

Companies in the cobalt supply chain should undertake and publicly disclose their due diligence practices. Companies also have a responsibility to undertake remedial action if human rights abuses have occurred at any point in an existing or past supply chain. The company must, in cooperation with other relevant actors, such as its suppliers and national authorities, remediate the harm suffered by people whose human rights have been abused.



Miners use chisels, mallets and other hand tools to mine for cobalt ore tens of metres under the ground in Kasulo, a residential neighbourhood of Kolwezi, May 2015. (Still taken from footage shot by a miner using a GoPro camera for Amnesty International) © Amnesty International and Afrewatch

Provinces in the Democratic Republic of the Congo pre-2015



METHODOLOGY

This report is the product of joint research by Amnesty International and African Resources Watch (Afrewatch). Amnesty International has been investigating human rights abuses in the DRC's copper and cobalt mines since 2011.¹ Afrewatch is a non-governmental organization that is based in the Democratic Republic of the Congo (DRC). It investigates human rights

abuses in the natural resources sector and supports communities affected by large-scale mining projects.²

Amnesty International and Afrewatch conducted research in southern DRC in April and May 2015. The primary focus was on mining and trading activities in Kolwezi, the centre of artisanal cobalt mining in the region, and the location of the Musompo minerals market. Researchers also investigated conditions in two other mining towns, Kambove and Likasi, and met officials in what was then the provincial capital of Katanga, Lubumbashi. In July 2015 the government created a new provincial structure for the country and Katanga was divided into four.³

New provinces created in 2015 from the former Katanga Province



1. See previous Amnesty International reports: *Bulldozed: how a mining company buried the truth about forced evictions in the Democratic Republic of the Congo*, 2014, <https://www.amnesty.org/en/latest/news/2014/11/drc-belgian-mining-giant-lied-over-bulldozing-homes/>, and *Profits and Loss: Mining and human rights in Katanga, Democratic Republic of the Congo*, 2013, <https://www.amnesty.org/en/documents/AFR62/001/2013/en>.
2. See Afrewatch homepage <http://www.afrewatch.org/>.
3. In June 2015 the government subdivided the DRC's existing 11 provinces into 26. The southern section of Katanga province, through which the Copperbelt runs, was divided into the new provinces of Haut-Katanga and Lualaba. The research for this report was conducted before these provinces were created and so the area of research is referred to as Katanga throughout. See Radio Okapi, *Découpage territorial : procédures d'installation de nouvelles provinces*, 13 July 2015, <http://www.radiookapi.net/actualite/2015/07/13/decoupage-territorial-procedures-d'installation-de-nouvelles-provinces> (accessed 15 December 2015).

Amnesty International and Afreewatch researchers visited two mining sites in Kolwezi and one in Kambove. Afreewatch researchers visited a further mining site in Kolwezi and one in Likasi.

Researchers interviewed 87 people who work, or who have worked in the mines. They interviewed 17 children, aged 9 to 17, and 53 adult men and women who work as artisanal miners or in collecting, washing and sorting minerals. Researchers also spoke to 18 people who trade in cobalt or who work for a company that does. They interviewed two businessmen who own trading companies in Musompo and members of staff from those and two other trading companies. They also interviewed representatives of artisanal miners' co-operatives, government officials, and members of civil society and non-governmental organisations (NGOs) working with women and children.

Researchers conducted most of the interviews in Swahili and the rest in French. Most interviews took place in private. In many cases interviewees did not want to be identified, and their names have been changed in this report to protect their identities. The interviews with people working in the mines, and representatives of co-operatives, were conducted in groups of up to ten people.

Staff from two charitable organisations arranged for Amnesty International and Afreewatch researchers to interview former or current child workers.⁴ Researchers conducted all interviews in small groups, and with the presence of NGO staff. All of the children agreed

to take part. Their names have been changed in this report to protect their identities.

Amnesty International and Afreewatch researchers collected photographic and video evidence, including of children working and of conditions inside a mine.

Several DRC government officials were contacted but said they were unavailable for meetings, including the Mayor of Kolwezi, the head of the Service d'Assistance et d'Encadrement du Small Scale Mining (SAESSCAM) in Kolwezi, and officials at the provincial government in Lubumbashi.

Researchers tracked the cobalt as it is traded in the DRC and exported to China. Using public records, including investor documents and statements published on company websites, Amnesty International identified companies in the supply chain in order to establish how the cobalt ends up in consumer products. In seeking to understand how this international supply chain works, as well as to ask questions about each company's due diligence policy, Amnesty International wrote to 26 companies in China, Germany, Japan, South Korea, Taiwan, UK, and the USA. The replies are summarised in a table in the report annexe.

The researchers would like to thank the many individuals and organizations in the DRC and elsewhere who agreed to be interviewed for this report or helped in other ways.

4. "Les Soeurs de Bon Pasteur", in Kolwezi and "Centre de Rattrapage Réconfort" in Kambove.

1. BACKGROUND: ARTISANAL COBALT MINING IN THE DRC

This chapter outlines what is meant by “artisanal mining,” why it is so widely practiced in southern Democratic Republic of the Congo (DRC) and how the government attempts to regulate it.

In the DRC, artisanal mining is widely understood to mean “mining by hand.”⁵ Whereas industrial mining operations involve machinery, artisanal miners use

their bare hands, and only the most rudimentary of tools, to dig out or collect rock containing minerals (i.e. ore).⁶

Artisanal miners in the DRC work in a range of different ways and locations to mine cobalt. There, cobalt is generally found in a dark grey rock known as heterogenite. Cobalt can also be extracted from other ores that miners collect primarily for their copper content, and that are then processed.⁷ In some places, the miners dig deep underground to access the ore. These miners, who are mainly adult men and are known in the DRC as *creuseurs*, work underground in tunnels and use chisels, mallets and other hand tools. They fill sacks with the ore, which are then tied to ropes and pulled by hand out of the mine shafts, which can be tens of metres deep.



Miners use chisels, mallets and other hand tools to mine for cobalt ore tens of metres under the ground in Kasulo, a residential neighbourhood of Kolwezi, May 2015. (Still taken from footage shot by a miner using a GoPro camera for Amnesty International) © Amnesty International and Afrewatch

5. There is no common international definition of artisanal mining. See Thomas Hentschel, Felix Hruschka and Michael Priester, *Artisanal and Small-Scale Mining: Challenges and Opportunities*, International Institute for Environment and Development and World Business Council for Sustainable Development, 2003, p. 5, available at: <http://pubs.iied.org/pdfs/92681IED.pdf>. “Broadly speaking, artisanal and small-scale mining refers to mining by individuals, groups, families or cooperatives with minimal or no mechanization, often in the informal (illegal) sector of the market. Despite many attempts, a common definition of ASM has yet to be established. In some countries a distinction is made between ‘artisanal mining’ that is purely manual and on a very small scale, and ‘small-scale mining’ that has some mechanization and is on a larger scale.”
6. For descriptions and analysis of artisanal mining in the DRC see Daniel Rothenberg and Ben Radley, *We miners take our lives in our hands, save nothing, and believe only in luck: The lived experience of human rights and labour violations in select artisanal mining sites in North and South Kivu*, Arizona State University, 2014 (Daniel Rothenberg and Ben Radley, *We miners take our lives in our hands*). Pact Inc., *PROMINES Study: Artisanal Mining in the Democratic Republic of Congo*, 2010, available at <http://congominers.org/system/attachments/assets/000/000/349/original/PACT-2010-Promines-StudyArtisanalMiningDRC.pdf>, (accessed 6 January 2016) (Pact Inc., *PROMINES Study*) and Nicholas Tsurukawa, et al., *Social impacts of artisanal cobalt mining in Katanga, Democratic Republic of Congo*, Ōko Institut, 2011, available at <http://www.oeko.de/oekodoc/1294/2011-419-en.pdf> (accessed 9 October 2015) (Nicholas Tsurukawa, et al., *Social impacts of artisanal cobalt mining in Katanga*).
7. Email from Kim Shedd, Mineral Commodity Specialist, U.S. Geological Survey, 7 October 2015.

In other places, miners, including many children, dig for cobalt in the discarded tailings (by-products such as rocks left over from mining and refining processes) of the region's many active and inactive industrial mines. They collect rocks containing minerals that

lie on or near the surface, most often without the companies' permission. The stones they pick are then washed, sifted and sorted in streams and lakes close to the mines. Many women and children are involved in washing and sorting the ore.



An artisanal miner sorts cobalt ore on the shore of Lake Malo, Kapata, on the outskirts of Kolwezi, DRC. Despite the health risks of exposure to cobalt the miner is not wearing a facemask, gloves or any protective clothing, May 2015 © Amnesty International and Afrewatch

The way these artisanal mining operations are managed and organised varies from site to site.⁸ For example, the adults and children who handpick stones on or near the surface of industrial mining concessions work for themselves. By contrast, some miners who dig underground do so as hired labourers, earning a fee from the owner of the land where they work. In other cases, artisanal miners are self-employed, working in teams, and sharing their earnings with mine owners. Some miners also have a business arrangement with an investor, who funds the digging of the tunnel, and manages the sale of the product.

COBALT MINING IN THE DRC

The DRC is, by far, the single most important source of cobalt in the world. In 2014, half of the world's cobalt, which is used in the lithium-ion rechargeable batteries that power electronic devices such as laptops and smartphones, was mined in the DRC.⁹ Demand for cobalt is growing at over 5 percent a year, and it is expected to continue doing so as the lithium-ion battery market expands with the increasing popularity of electric vehicles.¹⁰

8. Information based on multiple interviews with miners and businessmen who have invested in artisanal mines in Kolwezi, Kambove and Likasi, May 2015. See also Pact Inc., *PROMINES Study*.
 9. The US Geological Survey (USGS), *Mineral Commodity Summary: Cobalt 2015*, available at minerals.usgs.gov/minerals/pubs/commodity/cobalt/mcs-2015-cobal.pdf (accessed 9 October 2015) (USGS Minerals, *Mineral Commodity Summary: Cobalt 2015*).
 10. The Cobalt Development Institute, *Cobalt News July 2015*, p5, available at http://www.thecdi.com/cdi/images/news_pdf/15-3_cobalt_news.pdf (accessed 9 October 2015).

Cobalt is mined alongside copper in the south of the DRC, in Lualaba and Haut Katanga provinces (in what was known until recently as Katanga province).¹¹ This region, bordering Zambia, has always been the DRC's most significant mining area, but the nature of operations has changed dramatically over time. When they were developed in the early 1900s, the mines were large-scale industrial operations, managed by a single company. Today, industrial copper and cobalt mines are operated by a range of different Congolese and international firms. Running alongside them are many artisanal and non-industrial mining operations.¹²

The scale of these artisanal mining activities is substantial. The government estimates that 20% of the cobalt currently exported from the DRC comes from Katanga's artisanal miners.¹³ A study for the DRC government estimated that there are some 110,000 regular artisanal miners in Katanga, rising to about 150,000 on a seasonal basis.¹⁴

THE RISE OF ARTISANAL MINING IN KATANGA

The scale of artisanal cobalt mining has been ascribed to the government's chronic mismanagement of the economy over several decades, as it bankrupted its most important mining company and failed to

create alternative sources of employment.¹⁵ At its peak in the 1970s and 80s, the state mining company, the Générale des Carrières et des Mines S.A. (Gécamines) employed some 34,000 workers, ran farms, hospitals and schools for their benefit, and was the largest contributor to the state treasury.¹⁶ As the regime of President Mobutu Sese Seko collapsed in the early 1990s, so did Gécamines. The company stopped paying salaries, and employees were forced to fend for themselves, looting its assets by "cannibalizing mining apparatus, sending truckloads of spare parts, equipment and ore concentrates to South Africa."¹⁷

From 1998 to 2003, the country was engulfed by a second war, as Rwanda, Uganda and Burundi sought to overthrow Mobutu's successor, Laurent Kabila.¹⁸ With little chance of reviving the industrial mining sector while fighting continued, Kabila encouraged the inhabitants of the mine towns to dig for themselves.¹⁹ Thousands of adults and children, using only hand tools, started mining in the Gécamines concessions. In 1999, Kabila established a government agency to regulate, and tax, this growing sector.²⁰ The Service d'Assistance et d'Encadrement du Small Scale Mining (SAESSCAM) remains the key government body charged with overseeing artisanal mining (see below).

In 2002, the government published a new mining code.²¹ The aim was to revive the mining sector by

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11. In June 2015 the government subdivided the DRC's existing 11 provinces into 26. The southern section of Katanga province, through which the Copperbelt runs, was divided into the new provinces of Haut-Katanga and Lualaba. The research for this report was conducted before these provinces were created and so the area of research is referred to as Katanga throughout. See Radio Okapi, *Découpage territorial : procédures d'installation de nouvelles provinces*, 13 July 2015, available at <http://www.radiookapi.net/actualite/2015/07/13/dcoupage-territorial-procedures-dinstallation-de-nouvelles-provinces> (accessed 15 December 2015).
 12. USGS, 2012 *Minerals yearbook: Cobalt*, p. 19.4, available at <http://minerals.usgs.gov/minerals/pubs/commodity/cobalt/myb1-2012-cobal.pdf> (accessed 9 October 2015) (USGS, 2012 *Minerals yearbook*).
 13. Amnesty International interview with head of Service d'Assistance et d'Encadrement du Small-Scale Mining (SAESSCAM) in Katanga, Lubumbashi, May 18, 2015.
 14. These figures included miners operating in the north of the province, as well as in the southern "Copperbelt". It is not clear if they also included women and children involved in the processing of ore, but not in the actual mining. Pact Inc, *PROMINES Study*, p. 21.
 15. See Jason Stearns, *Dancing in the Glory of Monsters*, New York: PublicAffairs, 2011, p. 289 (Jason Stearns, *Dancing in the Glory of Monsters*).
 16. See Gécamines, *Notre Histoire*, available at <http://gecamines.cd/html/histoire.html> (accessed June 8, 2015), and Jason Stearns, *Dancing in the Glory of Monsters*, p. 289.
 17. James C. McKinley, Jr, *Zairian Rebels' New Allies: Men Armed With Briefcases*, The New York Times, 17 April 1997, <http://www.nytimes.com/1997/04/17/world/zairian-rebels-new-allies-men-armed-with-briefcases.html> (accessed June 8, 2015). See also B. Rubbers, *The Collapse of Gécamines*, Cahiers d'études Africaines, 2006/1 (No 181), http://www.cairn.info/article.php?ID_ARTICLE=CEA_181_0115.
 18. See Georges Nzongola-Ntalaja, *The Congo from Leopold to Kabila*, London: Zed Books, 2002, and Jason Stearns, *Dancing in the Glory of Monsters*.
 19. Nicholas Tsurukawa, et al., *Social impacts of artisanal cobalt mining in Katanga*, p16.
 20. "Historique du SAESSCAM," available at <http://www.saesscam.cd/SAESSCAM/pages/historique.php> (accessed June 10, 2015).
 21. DRC Mining Code (2002): *Loi N° 007/2002 Du 11 Juillet 2002 Portant Code Minier*, available in English at http://mines-rdc.cd/fr/documents/codemier_nier_eng.pdf (accessed 10 June 2015) (DRC Mining Code (2002)).

attracting foreign companies.²² Major western and Chinese mining companies subsequently resumed industrial mining at the most productive of Gécamines' old sites. They drove out the artisanal miners, sometimes provoking violent protests.²³ The government's policies also created many new artisanal miners. For example, in 2003, the government restructured Gécamines with the support of the World Bank. Almost half of the workforce, some 10,655 employees, lost their jobs, with many unemployed workers subsequently joining artisanal mining operations.²⁴

GOVERNMENT REGULATION OF ARTISANAL MINING

The 2002 Mining Code authorized artisanal mining within tightly defined limits. Article 21 of the Code recognized artisanal mining as "any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface area and depth up to a maximum of thirty metres."²⁵

The DRC's Mining Code stipulates that all miners must be adults.²⁶ They must hold valid "artisanal mining cards," issued by the provincial government.²⁷ They must sell their produce to licensed traders²⁸

and they must respect government regulations, the Code of Conduct for Artisanal Miners (*Code de conduit pour l'exploitant artisanal*), regarding "safety, health, use of water and the protection of the environment."²⁹ If miners do not respect these rules, the government can withdraw their mining cards.³⁰ However, these regulations, published separately in 2003, are mostly concerned with mitigating environmental damage.³¹ They provide little in the way of guidance on health and safety. For example, the regulations ban the use of explosives and mercury, but do not mention how other potentially harmful minerals, such as cobalt, should be handled.³² The regulations also oblige miners to construct tunnels no deeper than 30m, at an incline of at least 15 degrees, with horizontal banks every two metres, but provide no other information on how mines should be constructed and managed safely.³³

The Mining Code established that artisanal mining can only take place within authorized *Zones d'exploitation artisanale* (Artisanal Mining Zones or ZEAs) where industrial or semi-industrial mining is not viable.³⁴ However, the government has been criticised for not creating enough ZEAs.³⁵ As a result, most artisanal miners are pushed to work in unauthorized and unregulated areas, or to illegally trespass on land controlled by industrial mining companies to access cobalt and other minerals.

Mining outside authorized areas is illegal, and miners face the threat of being fined. However, it

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22. USGS, *The Mineral Industry of Congo (Kinshasa)*, 2012, p. 11.1 available at <http://minerals.usgs.gov/minerals/pubs/country/2012/myb3-2012-cg.pdf> (accessed 9 October 2015).
 23. E.g., Joe Bavier, *Police clash with miners in Congo copper heartland*, Reuters, 31 March 2008, available at <http://www.reuters.com/article/2008/03/31/congo-democratic-demonstration-idUSL3191292220080331> (accessed June 9, 2015) (Joe Bavier, *Police clash with miners in Congo copper heartland*).
 24. Nicholas Tsurukawa, et al., *Social impacts of artisanal cobalt mining in Katanga*, p16.
 25. DRC Mining Code (2002).
 26. DRC Mining Code (2002), Article 23.
 27. DRC Mining Code (2002), Article 111.
 28. DRC Mining Code (2002), Article 116.
 29. DRC Mining Code (2002), Article 112.
 30. DRC Mining Code (2002), Article 115.
 31. DRC Mining Regulations (2003), *Code De Conduite De L'exploitant Artisanal*, available at http://mines-rdc.cd/fr/documents/Annexe_V.pdf (accessed 9 October 2015).
 32. DRC Mining Regulations (2003), Article 2.
 33. DRC Mining Regulations (2003), Article 9.
 34. DRC Mining Code (2002), Article 109.
 35. Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*, 2013, available at http://www.prominesrdc.cd/fr/Rapport/Rapport_Orga_saess.pdf (accessed 9 October 2015) (Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*).

has been argued that these fines are so large, and so beyond the means of miners to pay, that they are essentially meaningless, and do not serve as a deterrent.³⁶ For example, any person engaging in illegal mining activities is liable for a fine of between US\$10,000 and US\$250,000. Similarly, any person purchasing or selling minerals in contravention of the law will be liable for a fine of US\$10,000 and US\$30,000.³⁷ Miners in unauthorized areas still live under the constant fear of being moved on by the government, and there have been violent confrontations as they have tried to resist this.³⁸

As noted above, the government agency charged with regulating artisanal mining, and ensuring that these rules are met, is called SAESSCAM. Its failure to do so adequately has been widely reported on.³⁹ The main criticisms of SAESSCAM centres on its lack of capacity to monitor the thousands of artisanal mines that exist across the DRC. This issue is examined in detail in Chapter 2.⁴⁰

GLOBAL TRADE

Cobalt that is dug from the DRC's artisanal mines soon enters a global trading network. It is an important mineral that has many different commercial, industrial and military applications.⁴¹ For example, cobalt is contained in super alloys used in jet engines, and in the lithium-ion batteries that power most electronic devices such as laptops and cell phones.

Artisanal miners sell their products at authorized buying houses close to the mines, many of which are run by foreign nationals. These buying houses then sell the ore to international trading companies, which refine it within the DRC before export. Typically, the mineral is then loaded onto trucks and driven to the South African port of Durban. From there, ships carry most of it to China for further processing and sale to component manufacturers.⁴² For this report, researchers have traced many of the companies involved in this supply chain (See Chapter 4).

36. Pact Inc., *PROMINES Study*, p. 25.

37. DRC Mining Code (2002), Articles 299 and 302.

38. Joe Bavier, *Police clash with miners in Congo copper heartland*.

39. Daniel Rothenberg and Ben Radley, *We miners take our lives in our hands*; Pact Inc., *PROMINES Study*; and Nicholas Tsurukawa, et al., *Social impacts of artisanal cobalt mining in Katanga*.

40. Some of these unauthorized mines are in privately-owned mining concessions, whose owners allow artisanal miners to operate in exchange for a percentage of their earnings. Other unauthorized artisanal mines are dug in areas, outside of mining concessions, where locals find minerals. Elsewhere, miners break into industrial mine complexes to scavenge among the tailings or dig mines for cobalt and other minerals. Amnesty International interviews with two mining officials, Katanga, August 2015.

41. USGS, *2012 Minerals yearbook*.

42. USGS, *Mineral Commodity Summary: Cobalt 2015*.

2. HUMAN RIGHTS ABUSES IN ARTISANAL COBALT MINING

This chapter outlines the human rights abuses taking place in artisanal cobalt mining operations in the Democratic Republic of the Congo (DRC). The chapter is broken down into three sections. Section I looks at the health hazards that miners are exposed

to, including the risk of fatal accidents. This section includes a description of mining activities in Kasulo, an area of Kolwezi city. Section II looks at the issue of child labour in artisanal mines. Section III outlines the DRC's obligations to protect workers and children under international human rights law, and examines its failure to do so.

I. HAZARDOUS WORKING CONDITIONS IN ARTISANAL COBALT MINES

CASE STUDY 1: KASULO

Kasulo is a residential neighbourhood of Kolwezi, a town which is built around a number of major industrial copper and cobalt mines. In the summer of 2014, residents discovered that a rich seam of heterogenite ore runs under their homes. In July 2014, the mayor of Kolwezi outlawed mining in Kasulo as it is not an officially designated artisanal mining zone (ZEA).⁴³ Yet since the discovery, the residents, along with thousands of miners who flocked to the neighbourhood, have dug hundreds of mines. Satellite images that were taken before and after the cobalt was discovered reveal the scale of the affected area.



Satellite images of Kasulo before July 2014 when residents and miners began digging for cobalt. © DigitalGlobe 2015.

43. Radio Okapi, *Le maire interdit l'exploitation artisanale de minerais à Kasulo*, 18 July 2014 <http://radiookapi.net/societe/2014/07/18/kolwezi-le-maire-interdit-lexploitation-artisanale-de-minerais-kasulo/> (accessed 9 October 2015).



Satellite images of Kasulo taken after July 2014 showing the extent of the digging in the neighbourhood, where hundreds of mines have been dug. © DigitalGlobe 2015.

Researchers from Amnesty International and Afreewatch visited Kasulo in April and May 2015. It is a densely populated area, with mining happening alongside, and often inside, people's homes. In one house, researchers saw a mine shaft leading down through the floor of a room. The owner said that he did not want to start a mine, but said he felt he had no choice when his neighbours started tunnelling under his plot of land.⁴⁴

One of the miners took a camera, provided by the researchers, and filmed inside the mine.⁴⁵ His footage shows a narrow shaft that descends deep underground, which the miners said was more than 30 metres deep. The miners climb down with bare feet, holding on to small ledges that have been cut out of the side. At the bottom of the pit, the miners have dug a tunnel that follows the heterogenite seam as it curves, rises and falls. At several points the tunnel meets those of neighbouring teams – the miners told researchers that they worry that at night when their mine is unguarded, their neighbours sometimes break into their tunnel to steal their ore. In some places, the tunnel is wide and tall so that the men can stand upright; in others it is extremely narrow, and they have to crawl. The tunnel is not held up by supports, but the miners say they know how to dig through the rock so that it does not collapse.



Miners climb out of a mine shaft by placing their hands and feet in holes carved out of the sides of the pit shaft. They use a rope attached to a beam stretched over the mouth of the pit as support. Sometimes the rope cuts and miners fall, a miner told researchers, May 2015 © Amnesty International and Afreewatch

44. Amnesty International interview, Kolwezi, 10 May 2015.

45. On file with Amnesty International.



The head torches of the miners light up the pits where they dig for cobalt tens of metres below Kasulo, where residents and miners have dug hundreds of pits to extract this valuable mineral, May 2015. (Still taken from footage shot by a miner using a GoPro camera for Amnesty International). © Amnesty International and Afrewatch

The only tools the men have are mallets, chisels and head torches. The miners do not have gloves, boots, helmets, or face masks to prevent them from breathing in cobalt dust. At the end of each shift the men pull up sacks of rock using a rope. Didier, a 22 year old student who started mining to pay for his college fees, said that he and the other miners are afraid of accidents and drink alcohol to forget the risks.⁴⁶

Researchers found no evidence in Kasulo that children go into the tunnels, yet they are openly working on the surface. Researchers photographed two groups of boys who appeared under the age of 16 sorting piles of minerals. They were not wearing gloves or face masks, even though, as discussed later, cobalt ore can be a hazardous substance. Mobile phone footage of Kasulo, taken by a human rights activist, also shows several groups of boys under the age of 16 doing this work.⁴⁷ Micheline, a 32-year-old woman who provides food for miners in Kasulo, said that there are children as young as six there. "They collect and gather the minerals. Parents send their children there, because they don't have money and because they don't have jobs," she said.⁴⁸



Children sorting and crushing cobalt ore in the neighbourhood of Kasulo, Kolwezi, DRC. Since the discovery hundreds of mines have been dug by artisanal miners in the neighbourhood. May 2015 © Amnesty International and Afrewatch

The mining area is close to the centre of Kolwezi and connected by a main road. There is a police station at the entrance to the neighbourhood. Miners said that the police tax vehicles carrying ore as they pass by. Inside the neighbourhood, the researchers themselves were stopped by men, who told them they were not permitted to enter a mining area. The men, who said that they were members of the mines police, demanded payment in the form of a fine. While one man was in a regular police uniform, the others were not.

46. Amnesty International interview, Kolwezi, 10 May 2015.

47. There is a series of films of mining activities, purportedly filmed in Kasulo in August 2014, for example, <https://www.youtube.com/watch?v=WrYC71j70X8>

48. Amnesty International interview, Kolwezi, 10 May 2015.

COBALT: HEALTH RISKS

"When we come out of the mine we are tired. The dust is bad. Some people have problems with their lungs,"

Pierre, 27, artisanal miner, Kasulo, Kolwezi.⁴⁹

The men, women and children involved in artisanal cobalt mining are exposed to a number of different health risks. To begin with, exposure to high levels of cobalt can, according to the World Health Organization, have both short and long-term negative health effects.⁵⁰ Chronic exposure to dust containing cobalt can result in a potentially fatal lung disease called "hard metal lung disease," according to the US Centre for Disease Control (CDC).⁵¹ Inhalation of cobalt particles can also cause "respiratory sensitization, asthma, shortness of breath, and decreased pulmonary function." Sustained skin contact with cobalt may lead to contact dermatitis.⁵²



Children sorting cobalt ore in the neighbourhood of Kasulo, Kolwezi, DRC, May 2015. © Amnesty International and Afreewatch

The DRC Mining Code (2002) and Regulations (2003) provide no guidance on safety equipment or how to handle substances which may pose a danger to human health, apart from mercury. By contrast, many regional and national bodies provide safety guidance for people handling cobalt on a regular basis. These advise that people should wear protective equipment to ensure they do not come into contact with the mineral, or inhale its dust.⁵³ The CDC, for example, advises people working with cobalt to wear respirators, impervious clothing, gloves and "face shields."⁵⁴

Researchers from Amnesty International and Afreewatch visited five cobalt mining areas, and interviewed nearly 90 men, women and children involved in mining cobalt. The vast majority did not have the most basic protective equipment, such as gloves, or even work clothes such as overalls. Despite the fact that they face the potentially fatal risk of inhaling cobalt dust while they work, none of those whom Amnesty International and Afreewatch researchers saw or spoke to even had basic facemasks.

Safety guidance, issued by regional and national regulatory bodies in other countries, also advises that workspaces where the mineral is handled should be well ventilated.⁵⁵ Miners told Amnesty International and Afreewatch that their underground mines were not well ventilated, and that the build-up of dust in the tunnels frequently affected them. It is routine for miners to spend 12 hours a day working underground.⁵⁶

Many of the miners complained that they coughed a lot or had problems with their lungs, such as Corneille, who has worked in "Laverie" mine at

49. Amnesty International interview, Kolwezi, 10 May 2015.

50. World Health Organization, Concise *International Chemical Assessment Document 69: Cobalt and Inorganic Cobalt Compounds*, 2006, available at <http://www.who.int/ipcs/publications/cicad/cicad69%20.pdf> (accessed 9 October 2015).

51. Center for Disease Control (CDC), *Workplace Safety & Health Topics: Cobalt*, available at <http://www.cdc.gov/niosh/topics/cobalt/> (accessed 9 October 2015) (CDC, *Workplace Safety & Health Topics: Cobalt*).

52. CDC, *Workplace Safety & Health Topics: Cobalt*.

53. European Chemicals Agency, *Cobalt: Guidance on Safe Use*, http://apps.echa.europa.eu/registered/data/dossiers/DISS-9c8246bc-6f29-126a-e044-00144f67d249/AGGR-8183f687-8b78-4582-8473-66e251a45822_DISS-9c8246bc-6f29-126a-e044-00144f67d249.html#AGGR-8183f687-8b78-4582-8473-66e251a45822, (accessed 18 November 2015) (European Chemicals Agency, *Cobalt: Guidance on Safe Use*); UK Health and Safety Executive, *Cobalt and you: Working with cobalt – are you at risk?*, 2013, <http://www.hse.gov.uk/pubns/indg442.pdf> (accessed 18 July 2015) (UK Health and Safety Executive, *Cobalt and you*).

54. CDC, *Workplace Safety & Health Topics: Cobalt*.

55. CDC, *Workplace Safety & Health Topics: Cobalt*; European Chemicals Agency, *Cobalt: Guidance on Safe Use*; and UK Health and Safety Executive, *Cobalt and you*.

56. Amnesty International interviews with artisanal miners, Kasulo, Kolwezi, 10 May, Kambove, 15 May 2015, Likasi, 16 May 2015.

Kambove for four years, and Albert, who has worked in several mines near Likasi since 1997.⁵⁷

Researchers also spoke to women who complained of respiratory problems and pain as a result of carrying heavy loads and the physically demanding nature of the work. Josephine, a 33 year old mother of five, said she would have to carry 50 kg sacks for more than an hour at a time. “We all have problems with our lungs, and pain all over our bodies.”⁵⁸ Researchers spoke to other women who complained of suffering frequent urinary tract infections, which they attributed to working in dirty water all day.⁵⁹

The government does not conduct health monitoring, so the people working in the mining areas said that they were not sure if the health issues they complained of were linked to exposure to cobalt. Studies have shown that poor sanitation and health care provision are common in artisanal mining areas. According to the International Institute for Environment and Development:

*“This is generally due to the supposedly ‘temporary’ status of these communities. In many cases, the discovery of a deposit results in a sudden arrival of miners from other regions in search of new opportunities. Unorganized camps grow virtually overnight. These remotely located camps, because of their temporary status, do not usually qualify for public health-care facilities — especially from the viewpoint of public health officers with chronically low government health-care budgets.”*⁶⁰

RISK OF FATAL ACCIDENTS UNDERGROUND

“There are many accidents. Many tunnels collapse. The bodies are still there,”

Emmanuel, 32, artisanal miner for ten years, Kasulo, Kolwezi.⁶¹

The mines can also be dangerous places to work if not constructed and managed safely. The DRC’s UN-run radio station, Radio Okapi, one of the country’s few reliable sources of independent information, reported the following incidents at unauthorized artisanal mines in cobalt mining areas in 2014 and 2015:

- At least 13 miners died when their tunnel collapsed in Mabaya, an artisanal cobalt mining area on 8 September 2015. The previous week, 17 miners died in four separate accidents in the same locality, according to a local NGO.⁶²
- Five miners died and 13 others were injured following an underground fire at a cobalt mine in Kasulo, Kolwezi, on 5 September 2015. The miners had lit a tyre underground to try to break the rock.⁶³
- Seven miners died in three separate tunnel collapses at cobalt mines in Kasumbalesa, in August 2015.⁶⁴
- 15 miners died following a fire in a cobalt mine in Kasulo on 26 December 2014.⁶⁵

57. Amnesty International interviews, Kambove 15 May 2015, and Likasi, 16 May 2015.

58. Amnesty International interview, Kolwezi, 11 May 2015.

59. According to a DRC government medical expert, these infections could be caused by bacteria in the water, due to people defecating nearby. Email from Dr Marie-Louise Mbo, 18 December 2015.

60. Thomas Hentschel, Felix Hruschka and Michael Priester, *Artisanal and Small-Scale Mining: Challenges and Opportunities*, International Institute for Environment and Development and World Business Council for Sustainable Development, 2003, p28, available at <http://pubs.iied.org/pdfs/9268IIED.pdf> (accessed 9 October 2015).

61. Amnesty International interview, Kolwezi, 10 May 2015.

62. Radio Okapi, *13 creuseurs meurent à la recherche du cobalt au Haut-Katanga*, 8 September 2015, www.radiookapi.net/2015/09/08/actualite/societe/rdc-13-morts-lors-dun-eboulement-de-terre-dans-un-nouvelle-mine-de (accessed 23 December 2015) (Radio Okapi, *13 creuseurs meurent à la recherche du cobalt au Haut-Katanga*).

63. Radio Okapi, *5 morts dans un incendie à Kasulo*, 5 September 2015, www.radiookapi.net/2015/09/05/actualite/societe/lualaba-5-morts-dans-un-incendie-kasulo (accessed 23 December 2015) (Radio Okapi, *5 morts dans un incendie à Kasulo*).

64. Radio Okapi, *7 personnes meurent dans des éboulements de terre à Kasumbalesa*, 4 September 2015, <http://www.radiookapi.net/2015/09/04/actualite/societe/haut-katanga-7-personnes-meurent-dans-des-eboulements-de-terre> (accessed 23 December 2015).

65. Radio Okapi, *15 creuseurs artisanaux morts brûlés dans une galerie souterraine à Kolwezi*, 27 December 2015, www.radiookapi.net/actualite/2014/12/27/katanga-15-creuseurs-artisanaux-morts-brules-dans-une-galerie-souterraine-kolwezi/ (accessed 23 December 2015).

- 16 men died in three separate incidents while mining at sites in the Kawama area of Kolwezi, either in pit collapses or through suffocation, in September 2014.⁶⁶
- At least nine died in a pit collapse caused by rain at Mashamba, outside Kolwezi, in December 2014.⁶⁷

There is no official data available on the number of fatalities that occur, but miners in unregulated mines said that they risk injury or death whenever they go underground, and accidents are common. Jean-Pierre, the owner of a mine in Kasulo, Kolwezi said that there were 5-6 accidents a month in the area, and each time he was asked to contribute money to help the injured miners.⁶⁸ Pierre, a miner there who broke his leg in 2011 when a tunnel caved in, said that "mine collapses are frequent." He was hauled out of the mine by his co-workers and it took him 6 months to recover.⁶⁹

Many accidents are not recorded as miners may not want to come into contact with the authorities because they are working without licenses in unauthorized mining areas, explained Sister Nathalie Kangaj, who runs a legal advice centre in Kolwezi. Additionally, the miners may have travelled a long way from their families to work in the mines. Sister Nathalie said that in some cases the bodies of miners who have died underground have never been recovered. She recalled a recent case where she was visited by the father of a miner who had been buried alive in a mine, but whose body was not found. "They die and are forgotten," she said.⁷⁰

Miners explained some of the reasons why accidents are common. For example, some engage in dangerous practices, such as lighting fires under rocks to break them. This can kill miners by burning up the oxygen underground.⁷¹ Hand-dug mines can extend for tens of metres underground, often without any support to hold them up.⁷² These tunnels do not follow straight lines, but follow mineral seams instead.⁷³ Miners estimated that the tunnels could reach up to 60 metres, although they did not have accurate measures. François, a 37 year old miner, judged the depth of the tunnel in Kambove by the time it took him to reach the bottom: 15 minutes.⁷⁴ Miners said that they trusted their instincts and expertise to ensure that these tunnels did not collapse, but accidents occur if they make mistakes or if rain water enters.⁷⁵ In Kasulo, Kolwezi, miners complained that there was no co-ordination between rival groups so that their tunnels sometimes met, undermining their walls.⁷⁶

According to Michael, a 22 year old miner in Kambove who has worked since he was 15, one of the reasons for the accidents is that some miners ignore warnings not to dig in mines where accidents have already taken place:

*"The accidents are common. They put a red cross on the pits where there has been an accident to show that it is dangerous. But some people still mine in those ones already declared dangerous. Last Saturday there was a mine collapse and somebody died. They only recovered his body on Tuesday. Three others were injured. Then on Tuesday there was another collapse and another miner died."*⁷⁷

66. Radio Okapi, *16 creuseurs artisanaux sont morts dans des mines à Kawama*, 26 September 2014, <http://radiookapi.net/actualite/2014/09/26/katanga-16-creuseurs-artisanaux-sont-morts-dans-des-mines-kawama/> (accessed 23 December 2015) (Radio Okapi, *16 creuseurs artisanaux sont morts dans des mines à Kawama*).

67. Radio Okapi, *9 morts dans un éboulement de terre à Kolwezi*, 11 December 2014, <http://radiookapi.net/actualite/2014/11/12/katanga-9-morts-dans-eboulement-de-terre-kolwezi/> (accessed 23 December 2015).

68. Amnesty International interview, Kolwezi, 10 May 2015.

69. Amnesty International interview, Kolwezi, 11 May 2015.

70. Amnesty International interview with Sister Nathalie Kangaj, Kolwezi, 9 May 2015.

71. Radio Okapi, *5 morts dans un incendie à Kasulo*.

72. Amnesty International interviews Kasulo, Kolwezi, 10 May 2015, Kambove, 15 May 2015, Likasi, 16 May 2015.

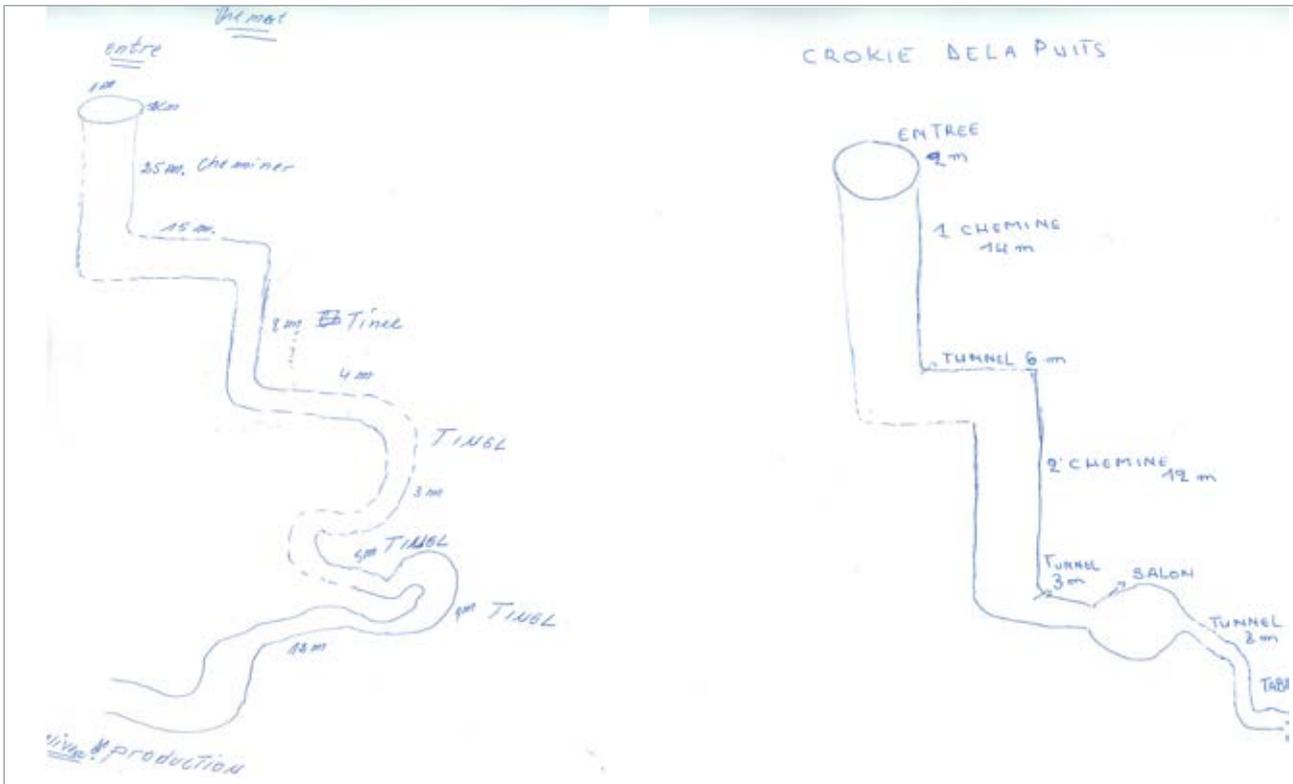
73. Amnesty International interviews Kambove, 15 May 2015, Likasi, 16 May 2015.

74. Amnesty International interview Kambove, 15 May 2015.

75. Radio Okapi, *13 creuseurs meurent à la recherche du cobalt au Haut-Katanga*.

76. Amnesty International interview, Kasulo, Kolwezi, 10 May 2015.

77. Amnesty International interview, Kolwezi, 15 May 2015.



Diagrams drawn by artisanal miners to show the layout and depth of their mine. The miners dig the tunnels using hand tools, following the seam of cobalt ore as it winds and descends down through the earth. The tunnels often go beyond the maximum depth of 30 metres stipulated by the DRC's Mining Code. © Amnesty International and Afrewatch

Some mine shafts are so deep that oxygen needs to be pumped into them, with the danger that the generators can fail and those working in the mines will suffocate.⁷⁸ Richard, the 37-year-old miner in Kambove, explained that when the generators run out of fuel, they cannot breathe and need to climb out as fast as possible.⁷⁹

Researchers watched miners descend a mine shaft in Kasulo barefoot, placing their hands and feet in holes carved out of the sides of the pit shaft. They used a rope attached to a beam stretched over the mouth of the pit as support. One of them said that sometimes, “the rope cuts, and people fall.”⁸⁰



Miners use a rope attached to a beam stretched over the mouth of the pit as support to climb down into the pit or climb out. © Amnesty International and Afrewatch

78. Radio Okapi, *Katanga: 16 creuseurs artisanaux sont morts dans des mines à Kawama*.

79. Amnesty International interview, Kambove, 15 May 2015.

80. Amnesty International interview, Kolwezi, 10 May 2015.



An air pump supplies oxygen to artisanal miners working in the pits in a mine on the outskirts of Kolwezi, DRC. A miner told researchers that when the generators run out of fuel, they cannot breathe and need to climb out as fast as possible, May 2015. © Amnesty International and Afrewatch

CASE STUDY 2: KAPATA

Kapata is a township originally built for mine workers, on the outskirts of Kolwezi. It is surrounded by industrial mining concessions. It has a lake, called Lake Malo, made by a dam created by the tailings of an industrial mine.

Amnesty International and Afrewatch researchers visited Kapata in May 2015, and saw about one hundred people, including many children, working at the edge of and in the lake. The people were washing and sorting ore containing cobalt and copper that they had scavenged for in the tailings of the industrial mining concessions. Some of the women had babies and infants with them.

Researchers spoke to François, who was sorting stones with his 13-year-old son, Charles.⁸¹ He said that Charles sorts and washes the minerals, before helping to transport them to a nearby trading house, which buys the ore. François said that Charles goes to school each morning, and works in the afternoon:



Women wash mineral ore in Lake Malo, Kapata on the outskirts of Kolwezi, DRC. One woman told researchers that it was very difficult working long days from 6am until 6pm in the sun with no cover and no shade, May 2015. © Amnesty International and Afrewatch

81. Amnesty International interview, Kapata, 12 May 2015.

*"It is difficult to afford the school fees. It is difficult to afford food. We work because we have to, because there are no jobs. Give us jobs and we'll look after our children properly."*⁸²

Maude, aged 37, who had been washing mineral ore for seven years, told researchers:

*"I work washing stones to pay the rent and to support my husband and five children. I have three children in school, but can't afford to send two of them."*⁸³

Maude said that she washed eight to twelve sacks of 50 kg per day, for which she earned 1,500 Congolese Francs (around US\$1.50). She said it was very difficult working long days from 6am until 6pm in the sun with no cover and no shade.⁸⁴ Four women said that every day they have to pay 500 Congolese Francs (\$US 0.50) as tax to an official of the government agency SAESSCAM, who the researchers met.⁸⁵

After washing and sorting ore, the people working there transported it to one of the buying houses close by. One Chinese-owned trading house, called "Good Show," is located about 50m away from the lake. Workers there said that they then sell the ore to bigger companies which refine and export the ore.⁸⁶



Many women, some with babies and young infants, wash and sort mineral ore on the shore and in the shallow waters of Lake Malo, Kapata on the outskirts of Kolwezi, DRC, May 2015 © Amnesty International and Afrewatch

82. Amnesty International interview, Kapata, 12 May 2015.
 83. Amnesty International interview, Kapata, 12 May 2015.
 84. Amnesty International interview, Kapata, 12 May 2015.
 85. Amnesty International interview, Kapata, 12 May 2015.
 86. Amnesty International interview, Kapata, 12 May 2015.

II. CHILDREN IN ARTISANAL COBALT MINING

"I worked in the mines because my parents couldn't afford to pay for food and clothes for me. Papa is unemployed, and mama sells charcoal."

Arthur 13, who worked in a mine from age 9 to 11 years old.⁸⁷

Amnesty International and Afrewatch researchers interviewed 17 boys and girls in Kolwezi and Kambove who had mined, collected or handled cobalt. The youngest was seven years old when he worked at the mine. All but one of the children worked above ground, either collecting minerals from the mountains of tailings in active and inactive industrial mining concessions, or working in streams and lakes close

to the concessions where they washed and sorted the stones. One of the boys said that he had also worked as a miner underground.⁸⁸

Researchers also observed children working at four unregulated mining areas in April and May 2015 – two in Kolwezi (Kasulo and Malo Lake) and two in Kambove (an inactive Gécamines site and the Laverie). It is no secret that children mine cobalt in the DRC. The US Department of Labor has listed it as a good produced by child labour since at least 2009.⁸⁹ Several non-governmental organisations (NGOs) have also published studies on child labour in Katangan mines. UNICEF estimated in 2014 that approximately 40,000 boys and girls work in all the mines across the whole of the former province, many of them involved in cobalt mining.⁹⁰ In 2013, World Vision published a detailed study of children working in the artisanal mines of Kambove.⁹¹

THE WORST FORMS OF CHILD LABOUR

DRC is a party to the International Labour Organization (ILO) Worst Forms of Child Labour Convention (No. 182), which requires governments to take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour.⁹² Children are defined as all persons under the age of 18⁹³ and 'the worst forms of child labour' comprises amongst others, "work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children."⁹⁴

ILO Recommendation 190 gives guidance to states parties on determining the types of work that may harm the health, safety or morals of children. It recommends that consideration should be given to:

- (a) work which exposes children to physical, psychological or sexual abuse;
- (b) work underground, under water, at dangerous heights or in confined spaces;
- (c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;

87. Amnesty International interview, Kolwezi, 13 May 2015.

88. Amnesty International interview, Kolwezi, 13 May 2015.

89. US Department of Labor, *List of Goods Produced by Child Labor or Forced Labor*, available at www.dol.gov/ilab/reports/child-labor/list-of-goods/ (accessed 9 October 2015) (US Department of Labor, *List of Goods Produced by Child Labor or Forced Labor*).

90. UNICEF, Factsheet: *enfants dans les mines*, December 2014.

91. World Vision, *Child Miners Speak: key findings on children and artisanal mining in Kambove, DRC*, March 2013, available at: [http://www.worldvision.org/resources.nsf/main/press-reports/\\$file/201303_Child-Miners-Speak_REPORT.pdf](http://www.worldvision.org/resources.nsf/main/press-reports/$file/201303_Child-Miners-Speak_REPORT.pdf) (accessed 9 October 2015).

92. International Labour Organization (ILO), *Worst Forms of Child Labour Convention (No. 182)*, Art. 1, available at http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C182 (ILO, *Worst Forms of Child Labour Convention (No. 182)*).

93. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 2.

94. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 3 (d).

- (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;
- (e) work under particularly difficult conditions, such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.

According to the ILO, "[m]ining and quarrying are forms of work dangerous to children in every way".⁹⁵ "Mining and quarrying are physically dangerous because of the heavy and awkward loads, the strenuous work, the unstable underground structures, the heavy tools and equipment, the toxic dusts and chemicals and the exposure to extremes of heat and cold".⁹⁶ The ILO noted that "[e]vidence from various surveys and research studies demonstrates that mining is by far the most hazardous sector for children with respect to fatal injuries".⁹⁷ It described various health and other baseline studies on health problems associated with mining and exposure to chemicals and stated that "[a] cross-sectional study within one artisanal mine measured the levels of 17 different metals and non-metals in 47 children below the age of 14 years working in or living at the mine. This study revealed substantial exposure to various metals in the child workers. Overall, an analysis of urine samples demonstrated far higher levels of toxic metals in children miners in comparison with adults despite their lower exposure".⁹⁸ The ILO also noted that "[c]obalt, which has the potential to damage the heart, thyroid and lungs, and can exacerbate occupational asthma, was found in 87 per cent of children living close to a mining site. Blood levels not only exceeded the occupational limit values, but were the highest ever reported for a general population."⁹⁹

HAZARDOUS WORK

All of the tasks carried out by children in the mines require them to carry heavy sacks of mineral ore, sometimes carrying loads that weigh more than they do. Children reported carrying bags weighing anywhere between 20 – 40 kg.¹⁰⁰ Carrying and lifting heavy loads can be immediately injurious or can result in long-term damage such as joint and bone deformities, back injury, muscle injury and musculoskeletal injuries.¹⁰¹ Former child workers in the mines told Amnesty International researchers that they had suffered muscle pain and pain in the back, hips or in the whole body.¹⁰² Loïc, who worked from the ages of 9-11, said that his back used to hurt from bending over to collect stones and from carrying heavy sacks.¹⁰³

The children interviewed by researchers described the physically demanding nature of the work they did. They said that they worked for up to 12 hours a day in the mines, carrying heavy loads, to earn between one and two dollars a day. Even those children who went to school worked 10 – 12 hours during the weekend and school holidays, and in the time before and after school. The children who were not attending school worked in the mines all year around. Paul, aged 14, started mining at the age of 12 and worked in tunnels underground. He told researchers he would often "spend 24 hours down in the tunnels. I arrived in the morning and would leave the following morning."¹⁰⁴

95. ILO, *Children in Hazardous work: What we know, what we need to do*, 2011, p.32, available at: http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_155428.pdf (accessed 18 July 2015) (ILO, *Children in Hazardous work: What we know, what we need to do*).

96. ILO, *Children in Hazardous work: What we know, what we need to do*, p. 33.

97. ILO, *Children in Hazardous work: What we know, what we need to do*, p. 34.

98. ILO, *Children in Hazardous work: What we know, what we need to do*, p. 34 – 35.

99. ILO, *Children in Hazardous work: What we know, what we need to do*, p. 34.

100. When they sell the ore to traders, they pay them based on an estimate of weight, which is how the children said they knew the approximate weight of the bags they carried. Amnesty International interviews, Kolwezi, 13 May 2015.

101. ILO, *Children in Hazardous work: What we know, what we need to do*, p. 34.

102. Amnesty International interview, Kolwezi, 13 May 2015.

103. Amnesty International interview, Kolwezi, 13 May 2015.

104. Amnesty International interview, Kolwezi, 13 May 2015.

The children said that they worked in the open, in high temperatures, or in the rain. As with adult miners, none of the children interviewed for this report or observed in the mine sites had any sort of protective equipment, such as gloves or face masks when handling cobalt. The children are therefore exposed to high levels of cobalt on a consistent basis, leaving them vulnerable to short-term and long-term negative health impacts.

The children interviewed for this report complained of being frequently ill. "There is lots of dust, it is very easy to catch colds, and we hurt all over," Dany, a 15-year-old said.¹⁰⁵ According to Olivier, who worked from ages 10-13, "I had a cough and muscle pain and a runny nose. When it rained it was very difficult and I became sick."¹⁰⁶

When working in the mines, the children often went the whole day without eating. Mathy, who was forced to work at the age of nine after her father had an accident and lost his job, said she often did not eat all day. "I could only eat when I had enough money," she said.¹⁰⁷

PHYSICAL ABUSE FACED BY CHILDREN

As well as the routine hardships of daily work, artisanal mining can be dangerous and damaging for children in other ways. A child protection officer working at UNICEF told researchers that living or working in these areas exposes them to physical abuse, drug abuse, sexual exploitation and violence.¹⁰⁸ Amnesty International and Afrewatch researchers interviewed several children who said they had been beaten, or seen other children beaten, by security guards at mines in Kolwezi.

To reach the tailings where they can collect valuable stones containing cobalt, the children said that

they needed to enter mining concessions that were patrolled by security guards. Children in Kolwezi said that security guards sometimes caught children and physically abused them. The children said that some of these guards were employed by the state mining company, Gécamines.

One girl, Mathy, described how in 2012, when she was 12, she and a friend were caught on the concession by security guards:

*"They asked for money, but we didn't have any... They grabbed my friend and pushed her into a tank containing diesel oil. I was able to run away and hide, but I saw what happened. I cried. I was scared, I ran away and hid, so I saw what happened."*¹⁰⁹

Loïc said that guards often chased him and his friends. "Several times they caught us and they hit us," he said. According to Roger, aged 13, private security guards, "used to whip us, and sometimes they used to dunk us in dirty water."¹¹⁰

Juste, who was 11 at the time he mined, said that adult artisanal miners would also scare off the children, and sometimes stole their sacks of minerals. Olivier, 14, said that he worked in a team of five boys. If they were caught by the security guards they would have to pay them 1,500 Congolese Francs (US\$1.5), otherwise the guards would take their sacks.

The children said that they did not report these incidents to the police because they knew that they were trespassing illegally on land controlled by the mining companies and they did not want to get into trouble. They also feared that their complaints would not be taken seriously.

105. Amnesty International interview, Kolwezi, 13 May 2015.

106. Amnesty International interview, Kolwezi, 13 May 2015.

107. Amnesty International interview, Kolwezi, 13 May 2015.

108. Amnesty International interview with UNICEF child protection officer, Lubumbashi, 10 May 2015.

109. Amnesty International interview, Kolwezi, 13 May 2015.

110. Amnesty International interview, Kolwezi, 13 May 2015.

FINANCIAL EXPLOITATION OF CHILD WORKERS

The children in the mines mostly work independently, collecting and gathering minerals, which they then sell to *négociants* (traders), who then sell the minerals to buying houses.

Most children indicated that they earned between 1000-2000 Congolese Francs per day (US\$1-2). Children who collected, sorted, washed, crushed and transported minerals were paid per sack of minerals by the traders. The children had no way of independently verifying the weight of the sacks or the grade of the ore and so had to accept what the traders paid them, making them susceptible to exploitation. Loïc, 13, told researchers that he earned about 2000 Congolese Francs a day (US\$2) but that he did not feel he was paid fairly for his work:

*"I sold to négociants who have scales. But some of the others did not have scales and just estimated the weight and were not fair. They exploited the children, they paid us less than they paid the adults."*¹¹¹

The children did not take home all the money they earned, however. They told researchers how they often had to pay off state or private security agents and use the money for expenses. Kikaya, aged 9, explained that sometimes they would have to pay off the adult artisanal miners 500 Congolese Francs (US\$0.50), and that the adults would sometimes also steal from them.¹¹² Roger, 13, earned 1500 Congolese Francs per day (US\$1.50), but of that amount he had to pay guards 500 Congolese Francs (US\$0.50) and would spend about 200 Congolese Francs (US\$0.20) on food. He told researchers that he hardly had much money left at the end of the day.¹¹³ Sometimes children would be forced to sell to particular traders if they had borrowed money from them. Mathy, 14, worked in a pair collecting minerals from 6 am to 5 pm:

*"Sometimes if we didn't get a product we would go to a négociant and borrow money and then had to work for him for the next day. The next day the négociant would say no it's not 10kg its 8kg. It's all an estimate."*¹¹⁴

LACK OF FREE PRIMARY EDUCATION AND OTHER CAUSES OF CHILD LABOUR

"School fees are too expensive. Parents with no work can't send two, three, four children to school"

Pascal Bukengere Kanegeshe, school manager, Kolwezi.¹¹⁵

The children interviewed for this report said that they had to work, since their parents had no formal employment, and struggled to feed, clothe and educate their families. Family poverty is the main reason for working in the mines, according to child and adult miners, as well as NGO staff which work to remove children from the mines. According to the World Bank, almost two thirds of the DRC's population lives below the poverty line.¹¹⁶ Researchers spoke to a number of former child miners, who stated that they worked in the mines in order to contribute to the subsistence of their families. Fred, 13, told researchers that neither of his parents had work, so he had to work in the mine collecting minerals to contribute to the family. During term-time, he attended school and worked Saturdays in the mines, but during the holidays, he worked from morning to evening in the mines.¹¹⁷

Pierre, an adult miner working in Kasulo, Kolwezi, told researchers that:

*"parents send their children there, because they don't have the means to live and because they don't have jobs. If the children have nothing to eat, they go to work in the mines or they sell snacks/drinks."*¹¹⁸

111. Amnesty International interview, Kolwezi, 13 May 2015.

112. Amnesty International interview, Kolwezi, 13 May 2015.

113. Amnesty International interview, Kolwezi, 13 May 2015.

114. Amnesty International interview, Kolwezi, 13 May 2015.

115. Amnesty International interview with Manager, Projet Pour La Protection de L'enfant, Bon Pasteur, Kolwezi, 13 May 2015.

116. World Bank DRC country page, available at <http://data.worldbank.org/country/congo-dem-rep> (accessed 16 July 2015).

117. Amnesty International interview, Kolwezi, 13 May 2015.

118. Amnesty International interview, Kolwezi, 10 May 2015.

Dany, 15, told researchers that, *"all the money I earn in the mines I spend on food, because at home we don't eat."*¹¹⁹

Children interviewed for this report said that one of the main reasons that they had to work was because their parents could not afford school fees. The DRC Child Protection Code (2009), provides for free and compulsory primary education for all children.¹²⁰ However, as a result of a lack of adequate funding from the state, most schools still charge parents a monthly amount (known as the *minerval*) to cover their costs, such as teacher salaries, uniforms and learning materials.¹²¹ In Kolwezi, NGO staff told researchers, this amount varies between 10 - 30,000 Congolese Francs (US\$10-30) per month, which is more than many can afford.¹²² The problem is widespread across the whole of the former province of Katanga, despite its mineral wealth. In 2013, it had 1.3 million children aged 5-17 out of school in 2013, according to UNICEF.¹²³ That was the largest number of any province in the DRC.

Researchers met François by Lake Malo in Kapata, just outside Kolwezi. He told researchers that he had three out of five children studying in school, but that they were expelled from school when they couldn't pay the fees. One son, Charles, now works with him at the mine and goes to school in the morning when he has the money.¹²⁴

Some of the children said that they did not go to school at all. Others said that they worked before or after school hours, during the weekends and holidays to pay for the fees. Dany, 15, said that he worked every evening after school, but was forced to miss school when he did not earn enough.¹²⁵ Eddie, 14, said that he started work at 6 am and was able to get to school by 9 am.¹²⁶ He said his parents sent him to work, *"to contribute to the family, to pay school fees, buy uniform and books."*

The physically demanding nature of the work that the children do, as well as the disruptions to their schooling when they or their parents don't have the money to pay the schools, can have negative effects on children's education.¹²⁷

FREE PRIMARY EDUCATION

At least one charity is now running a project in Kolwezi to address the problem. Researchers interviewed 15 children at a school in the Kanina area, which is run by a Catholic organisation, the Congregation of our Lady of Charity of the Good Shepherd (known as Les Sœurs du Bon Pasteur). The school has also been supported by UNICEF and World Vision. This school educates nearly 1000 boys and girls who worked in artisanal mines, whose families could not afford to send them to school. Staff members visit the mines to persuade children to come to the school. The number of pupils has doubled since was set up in 2013. Unlike other private or government-run schools in the DRC, it is completely free, and it also provides one meal a day to all pupils.¹²⁸ The manager said that this was enough incentive for the children's families to stop sending them to work and send them to school instead.

119. Amnesty International interview, Kolwezi, 13 May 2015.

120. DRC Child Protection Code, 2009, Article 38, available at <http://www.leganet.cd/Legislation/JO/2009/L.09.001.10.01.09.htm> (accessed 16 July 2015).

121. UNICEF, *To school, not to the mines: Investing in primary education in the Democratic Republic of the Congo*, 18 March 2013, available at www.unicef.org/education/drcongo_68298.html (accessed 16 July 2015) (UNICEF, *To school, not to the mines*).

122. Amnesty International interview with Sister Nathalie Kangaj, Kolwezi, 13 May 2015.

123. UNICEF, *To school, not to the mines*.

124. Amnesty International interview, Kolwezi, 12 May 2015.

125. Amnesty International interview, Kolwezi, 13 May 2015.

126. Amnesty International interview, Kolwezi, 13 May 2015.

127. Dr. Dorte Thorsen, *Children working in mines and quarries: evidence from West and Central Africa*, UNICEF, 2002.

128. Amnesty International interview with Pascal Bukengere Kanegeshe, school manager, Kolwezi, 13 May 2015.

III. FAILURE OF THE DRC GOVERNMENT TO PROTECT PEOPLE FROM HUMAN RIGHTS ABUSES

GAPS AND WEAKNESS IN REGULATION OF ARTISANAL MINING

As explained in Chapter one (Background), the Mining Code (2002) and its regulations establish that artisanal mining is only allowed to take place within authorized Zones d'exploitation artisanale (Artisanal Mining Zones or ZEAs) where industrial or semi-industrial mining is not viable.¹²⁹ The Mining Code also sets out the minimum standards for how artisanal mining operations should be run. Miners can lose their licenses (mining cards) if they break these rules.¹³⁰

The Service d'Assistance et d'Encadrement du Small Scale Mining (SAESSCAM) is the government agency set up to regulate artisanal mining and ensure that it is conducted safely. Staff are present at ZEAs, and are supposed to provide trainings and inspect tunnels, among other tasks. However, as explained below, there are significant gaps and weakness in the government's approach to and regulation of artisanal mining.

LACK OF AUTHORIZED AREAS FOR ARTISANAL MINERS

SAESSCAM's mandate is limited to artisanal miners working in the ZEAs. A Ministry of Mines official

explained that SAESSCAM is not "allowed to work in non-official artisanal mining areas, because the law stipulates that mining in these areas is illegal."¹³² PriceWaterhouseCoopers (PWC) also stated, when it audited the agency for the government in 2013 that "SAESSCAM, according to its mandate, cannot intervene in zones not established as ZEAs, as the mining going on there is illegal."¹³³

However, there is a shortage of ZEAs in the DRC's southern mining belt and most mining takes place in unauthorized zones.¹³⁴ According to a list maintained by the Ministry of Mines in Kinshasa, there are only 32 ZEAs in the entire copper and cobalt mining region of southern DRC. Of these, 26 were created in 2014 and 2015, but it is unknown how many of these are as yet operational.¹³⁵ The head of SAESSCAM's operations in the former province of Katanga acknowledged that there were not enough ZEAs to accommodate the number of artisanal miners there, but he assured researchers that the government is committed to creating more of them. He warned that this was a lengthy and costly process and that his agency lacked resources to do so.¹³⁶

Miners, traders, NGO staff and some government officials interviewed for this report also agreed that there were not enough ZEAs to support the large number of people who relied on artisanal mining for their livelihoods. Those which exist are often no longer productive or are hard to access. For example in Kolwezi, miners are only currently authorized to mine at one location, Mutoshi.¹³⁷ By contrast, unauthorized mining was taking place in at least ten different locations in or around the city in May 2015, when researchers visited the city. Government officials said that there were no functioning ZEAs in Kambove, and only two in Likasi.¹³⁸

129. DRC Mining Code (2002), Article 109.

130. Article 299 of the DRC Mining Code (2002) provides that any person engaging in illegal mining activities is liable for a fine of the local currency equivalent of US\$10,000 and US\$250,000. Under Article 302, any person purchasing or selling minerals in contravention of the law will be liable for a fine of the local currency equivalent of US\$10,000 and US\$30,000.

131. "Historique du SAESSCAM," available at <http://www.saesscam.cd/SAESSCAM/pages/historique.php> (accessed 10 June 2015).

132. Amnesty International interview, DRC, 5 January 2016.

133. Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*, p. 35.

134. Amnesty International interviews with government officials, NGO staff, traders, representatives of mining co-operatives, DRC. May 2015.

135. See <http://portals.flexicadastre.com/drc/en/> (accessed on 8 December 2015).

136. Amnesty International interview with the head of SAESSCAM in Katanga, Lubumbashi, 18 May 2015.

137. Information provided by DRC based NGO, May 2015.

138. Amnesty International interview with government officials, 15-16 May 2015.

OFFICIALS EXTORT ILLEGAL PAYMENTS FROM ARTISANAL MINERS

The fact that most artisanal mining is taking place outside of ZEAs does not mean that it is hidden from the government. Not only are state officials aware of the mining activities taking place in unauthorized locations, but they also benefit from them, according to miners and representatives of miners' cooperatives. Officials from a range of different government and security agencies control access to these mine sites and demand money from miners, they said. Amnesty International and Afreewatch researchers saw state agents at three mines they visited which are not ZEAs. In Kasulo, they saw uniformed police and were approached by two men out of uniform, and one in uniform, who said that they were members of the mines police, which is charged with ensuring security at mine sites. These men told the researchers to leave the area as foreigners were not allowed to visit mine sites without official permission, and demanded that the researchers pay a fine. Miners working in Kasulo told researchers that the police checked every vehicle leaving the neighbourhood and they had to pay them for each sack of ore.¹³⁹ There is a police station and check post on the road leading from Kasulo into central Kolwezi city, where vehicles containing the ore are stopped, researchers observed.

At Kapata, where families, including young children, wash and sort ore in a lake, researchers met an agent of SAESSCAM, who could not have failed to see the children working because he was so close to them. People washing ore there said that they had to pay him 500 Congolese Francs (approximately US\$0.50) a day to work there.¹⁴⁰ At a site in Kambove where researchers saw women and children washing ore, a uniformed policeman was present. The Presidential Guard (*Garde Républicaine*) is also present at artisanal mine sites and at buying houses in Kambove, according to multiple interviews with miners and traders.¹⁴¹ These miners and traders also said that the *Agence Nationale de Renseignements (ANR, the government intelligence agency)* had agents at mine sites. According to an artisanal miner with 20 years' experience at different mines:

*"There are always the Mines Police, SAESSCAM and the ANR, also the Ministry of Mines. You have to pay these state agents when you want to transport the minerals out of the mine. They do not give receipts for the payments."*¹⁴²

A Ministry of Mines official in the former province of Katanga, confirmed to researchers that none of these agencies, including SAESSCAM, are authorized to collect payments (referred to in the mining areas as "taxes") from artisanal miners.¹⁴³

These findings are backed up by research by other organisations. The PriceWaterhouseCoopers audit of SAESSCAM said that the collection of illegal taxes damaged its reputation with miners.¹⁴⁴ It cited an EU-funded study conducted in Kolwezi in 2011 which found that SAESSCAM charged a variety of illegal taxes, for example on the transport of minerals and as a fee for resolving conflicts between miners.¹⁴⁵

A recent report on artisanal gold mining in eastern DRC by the Open Society Initiative for Southern Africa, concluded that SAESSCAM:

139. Amnesty International interview with miners, Kasulo, 10 May 2015.

140. Amnesty International interview with women washing ore, Kapata, 12 May 2015.

141. Amnesty International interviews with miners and traders, Kambove, 15 May 2015.

142. Amnesty International interview, 15 May 2015.

143. Amnesty International interview, 5 January 2016.

144. Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*, p. 3.

145. Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*, p. 32-33.

“was established to support miners but its underpaid – or often unpaid – agents simply extort ‘taxes’, ‘levies’ and other ‘fees’ without providing any services in return. The government must totally restructure the institution or close it down.”¹⁴⁶

A 2010 study of artisanal mining in Kolwezi by Pact Inc. found that only a small minority (less than 3 percent) of miners paid the correct legal taxes, while all were regularly required to pay illegal “taxes”, including:

“taxes to enter and leave the mines; payments to work in the actual pits; payments to have their minerals registered; the police; the Guard Industrielle of Gécamines; and the traditional chiefs.”¹⁴⁷

The evidence suggests that the state officials are extorting illegal payments from artisanal miners, while turning a blind eye to the unsafe conditions in which miners work that breach DRC’s own laws, including the prohibition on child labour in mines.

LACK OF ADEQUATE SAFETY AND LABOUR STANDARDS

Worker rights in the DRC are enshrined in the country’s Labour Code (2002).¹⁴⁸ This includes regulations on working hours, salaries, and health and safety. It prohibits employment under the age of 16, and bans “the worst forms of child labour.”

As noted above, the DRC’s mining law includes a set of regulations, including a “code of conduct for artisanal mining,” which impose environmental and other obligations on artisanal miners.¹⁴⁹ However, this contains almost no provisions which protect their labour rights – they merely provide a few points of simple guidance on health and safety, such as banning the use of explosives, and limiting the depth of tunnels to 30m.¹⁵⁰ These regulations are supposed to be enforced by Ministry of Mines officials, specifically from SAESSCAM.¹⁵¹ The Mining Code also established the rules for how minerals are

traded, as discussed in Chapters 3 and 4. Licensed buying houses are required to buy mineral ore from licensed artisanal miners, but are not obliged by law to ask any other questions such as the exact location of where the mineral was mined nor about the conditions of extraction, such as whether children were involved.¹⁵²

The government says it is currently in the process of revising the 2002 Mining Code, and has invited civil society and industry groups to provide advice.¹⁵³ A draft of the code includes an article on human rights:

“It is illegal to mine or sell minerals coming from a site where the contravention/violation of the laws governing the protection of human rights, the rights of children or women’s rights have been the object of a written report by a competent authority.”¹⁵⁴

This is a good opportunity for the government to clarify laws governing artisanal mining, to ensure that better

146. Open Society Initiative for Southern Africa, Conflict Gold to Criminal Gold: The new face of artisanal gold mining in Congo, 2012, available at <http://www.osisa.org/other/economic-justice/drc/conflict-gold-criminal-gold-new-face-artisanal-gold-mining-congo>.

147. Pact Inc., *PROMINES Study*, p. 86-7.

148. The DRC Labour Code (2002), available at www.droit-afrique.com/images/textes/RDC/RDC%20-%20Code%20du%20travail%202002.pdf (accessed 7 January 2016) (DRC Labour Code).

149. DRC Mining Regulations (2003).

150. DRC Mining Regulations (2003), Article 2.

151. DRC Mining Code (2002), Article 14, “The Directorate of Mines is responsible for inspecting and supervising mining activities and quarry works with regard to safety, health, work procedures, production, transport, sale and social matters.”

152. DRC Mining Code (2002) Art 116-117.

153. Franz Wild, *Congo submits draft mining code in face of industry opposition*, 11 February 2015, available at <http://www.bloomberg.com/news/articles/2015-02-11/congo-submits-draft-mining-code-in-face-of-industry-opposition> (accessed 23 December 2015).

154. Draft Mining Code available at <http://congominer.org/reports/765-projet-de-loi-2015-sur-la-revision-du-code-minier>

protections are put in place. Further guidance is needed on labour and safety standards which should be followed by all artisanal miners. However as discussed below, there is also a need for greater clarity on which governmental agency will monitor compliance with such standards and provide support and training to artisanal miners. One article on human rights is not sufficient to meet the substantial gaps in regulations. The government also needs to address the complicity of officials who turn a blind eye to the dangerous conditions in which many artisanal miners work while still extorting illegal payments from them.

LACK OF CAPACITY AMONGST GOVERNMENTAL AGENCIES TO ADEQUATE MONITOR AND ENFORCE STANDARDS

The Ministry of Labour is responsible for ensuring effective implementation of the DRC Labour Code. This includes inspecting worksites for child labour, and ensuring that they abide by health and safety rules.¹⁵⁵

Researchers came across no examples of labour inspectors ever monitoring artisanal mining sites, whether these are authorized or unauthorized, in the former province of Katanga. One reason is a lack of capacity. In 2014, the ministry only employed 20 inspectors for the entire mining region of the former province of Katanga.¹⁵⁶ The head of a NGO based in southern DRC explained that,

*"The labour inspectors focus on companies [rather than artisanal mine sites]. Every city has one labour inspector, but each territory that they are responsible for is vast and they can't afford to travel."*¹⁵⁷

Assessments by other NGOs and the US Department of Labor have also pointed to the lack of resources within the labour inspectorate and the lack of monitoring and follow up on reports of child labour.¹⁵⁸ The US Department of Labor has noted:

"[L]abor inspectors often do not have adequate funding, staff, facilities, communications infrastructure, and means of transportation to conduct inspections... Labor inspectors did not receive training on the worst forms of child labor during 2014... The MOL [Ministry of Labour] does not have a system to track child labor complaints and did not keep records of child labor investigations during the reporting period... Information on the number of complaints, inspections, citations, and prosecutions related to child labor is not publicly available."¹⁵⁹

The agency with the clearest mandate to enforce government rules in artisanal mines is, as stated earlier, SAESSCAM. Its objectives include:¹⁶⁰

- To provide training and technical and financial assistance to miners.
- To monitor the flow of materials from mines to the point of sale.
- To ensure the collection of after-sales tax.
- To encourage the creation of miners' co-operatives.
- To provide guidance on security at artisanal mining sites and ensure that this is observed.

SAESSCAM officials in Kolwezi, Likasi and Lubumbashi described to researchers the activities that the agency undertakes to improve worker safety.¹⁶¹ They include training miners in how to construct safe mines, inspecting mines to ensure they are safe, establishing and training police units to patrol mining areas, and mediating between

155. DRC Labour Code (2002), Article 187.

156. US Department of Labor, *2014 Findings on the Worst Form of Child Labor*, p. 4. www.dol.gov/ilab/reports/child-labor/congo_democratic_republic.htm (US Department of Labor, *2014 Findings on the Worst Form of Child Labor*).

157. Email correspondence, 25 December 2015.

158. See for instance, Pact Inc, *Breaking the Chain: Ending the Supply of Child-Mined Minerals*, p12, 2013, available at: <http://www.pactworld.org/sites/default/files/PACT%20Child%20Labor%20Report%20English%202013.pdf>.

159. US Labour Department of Labor, *2014 Findings on the Worst Form of Child Labor*, p. 4.

160. "Décret n°047-C/2003 du 28 mars 2003 portant création et Status d'un service Public dénommé Service d'Assistance et d'Encadrement du Small Scale Mining ou Production Minière à Petite Echelle, en sigle " SAESSCAM," available at <http://www.saesscam.cd/SAESSCAM/pages/creation.php>. (accessed 9 October 2015).

161. Amnesty International interviews, 11 and 15 May 2015.

groups of miners when disputes arise. SAESSCAM supports the setting up of miners' co-operatives which manage the mine sites, seek investors and negotiate the sale of minerals. However, as noted earlier, PriceWaterhouseCoopers was highly critical of SAESSCAM's performance when it audited the agency for the government in 2013. It said that the agency lacked "a strategic plan," that it suffered from a lack of human resources and logistical support, and that its staff prioritized the collection of taxes from artisanal miners above all of their other tasks.¹⁶² It is not clear what actions the government has taken to improve SAESSCAM's performance since this audit was conducted.

FAILURE TO PROTECT CHILDREN FROM HAZARDOUS WORK AND TO ENSURE THEIR RIGHT TO EDUCATION

As discussed earlier in this chapter, child labour is common in the unauthorized artisanal cobalt mines of the DRC. The nature of work that the children do may involve working underground, transporting heavy loads, exposure to hazardous substances, risk of physical abuse, and working under difficult conditions including long hours of work. Such work "is likely to harm the health ... [and] safety ... of children" and constitutes one of the worst forms of child labour.¹⁶³

Child labour in the mines is illegal in the DRC. The Mining Code (2002) bans anyone under 18 from engaging in artisanal mining.¹⁶⁴ The Labour Code

(2002) outlaws "the worst forms of child labour."¹⁶⁵ However, as discussed above, the DRC government is failing to adequately enforce these laws in artisanal mines.

Under the DRC's constitution and a recently enacted law, primary education is meant to be compulsory and free.¹⁶⁶ However, the lack of adequate funding by the state to schools, fees and other financial barriers prevent children from accessing primary education. Various UN human rights monitoring bodies as well as ILO expert bodies have repeatedly called on the government to improve the functioning of the education system and to ensure access to primary education.¹⁶⁷ For example, in 2009, the Committee on the Rights of the Child recommended that the government "[e]nsure access to primary education, free of charge, including any additional (non-tuition) costs to all children without discrimination" and that "the State party prioritize the improvement of primary school enrolment and the prevention of dropouts with a view to eliminating the worst forms of child labour".¹⁶⁸

Despite recent improvements in the proportion of children attending school, the DRC is still amongst the countries with the highest number of children who are out of school, estimated by UNESCO to be "well above 2 million."¹⁶⁹

In 2011, the DRC developed a national action plan to eliminate the worst forms of child labour by 2020.¹⁷⁰ Among other things, this plan aims to strengthen the Labour Ministry so that it can deploy

162. Ministère des Mines – Unité d'Exécution du Projet PROMINES, *Audit du Cadre Institutionnel et Organisationnel régissant le Secteur des Mines*, p.

163. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 3(d).

164. DRC Mining Code (2002), Article 23.

165. DRC Labour Code (2002), Article 3.

166. Constitution of the Democratic Republic of the Congo, Article 43, and DRC Child Protection Code, 2009 (*Loi no 09/001 du 10 janvier 2009 portant protection de l'enfant*), Article 38 available at <http://www.leganet.cd/Legislation/JO/2009/L.09.001.10.01.09.htm> (accessed 9 October 2015).

167. See for instance, ILO Committee of Experts on the Application of Conventions and Recommendations, *Observation on a Direct Request, Worst Forms of Child Labour Convention, 1999 (No.182)*, Democratic Republic of Congo, adopted 2014, published 104th ILC session (2015), available at: http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO:13100:P13100_COMMENT_ID:3185795 (accessed 7 January 2015 (ILO Committee of Experts on the Application of Conventions and Recommendations, *Observation on a Direct Request, Worst Forms of Child Labour Convention, 1999 (No.182)*, Democratic Republic of Congo, adopted 2014, published 104th ILC session (2015)); and Committee on Economic, Social and Cultural Rights, Concluding Observations: Democratic Republic of the Congo, UN Doc. E/C.12/COD/CO/4, 20 November 2009, para. 35.

168. Committee on the Rights of the Child, *Concluding Observations: Democratic Republic of Congo*, UN Doc. CRC/C/COD/CO/2, 10 February 2009, paras 66 (a) and 81.

169. Direct Request (CEACR) - adopted 2013, published 103rd ILC session (2014) Minimum Age Convention, 1973 (No. 138) - Democratic Republic of the Congo (Ratification: 2001).

170. *Plan d'Action National (Pan) de Lutte Contre Les Pires Formes de Travail des Enfants en République démocratique du Congo*, available at <http://www.ilo.org/dyn/natlex/docs/MONOGRAPH/94977/111643/F-2051372699/COD-94977.pdf> (accessed 6 January 2015).

more inspectors, and ensure free and compulsory education for all children below the age of 16, which is the national minimum age for employment. However, this plan is yet to be formally adopted and implemented by the government,¹⁷¹ despite recommendations from ILO monitoring bodies for the government to adopt and fund the plan as a matter of urgency.¹⁷²

VIOLATIONS OF THE DRC'S INTERNATIONAL OBLIGATIONS

The DRC is a state party to various international and regional treaties, which require it to protect the rights of all persons to and at work, health, education, and an adequate standard of living, and children from work which is dangerous to their health or safety. These treaties include the International Covenant on Economic, Social and Cultural Rights, Convention on the Rights of the Child, Convention on the Elimination of All Forms of Discrimination Against Women, ILO Worst Forms of Child Labour Convention, ILO Minimum Age Convention and the African Charter on Human and Peoples Rights.

The government of the DRC has to ensure the right of all persons to work, to just conditions of work and to safe and healthy working conditions.¹⁷³ The Committee on Economic, Social and Cultural Rights has emphasised that "[w]ork as specified in article 6 of the Covenant must be decent work. This is work that respects the fundamental rights of the human person as well as the rights of workers in terms of conditions of work safety and remuneration. It also provides an income allowing workers to support themselves and their families as highlighted in

article 7 of the Covenant. These fundamental rights also include respect for the physical and mental integrity of the worker in the exercise of his/her employment."¹⁷⁴ The Committee has stressed that states must reduce the number of workers outside the formal economy, who as a result of that situation have no protection.¹⁷⁵

The right to health,¹⁷⁶ amongst other things, requires governments to improve "all aspects of environmental and industrial hygiene" and to prevent, treat and control occupational diseases. The Committee on Economic, Social and Cultural Rights has clarified the obligations of states to undertake preventive measures in respect of occupational accidents and diseases. The Committee has stated that this includes "the prevention and reduction of the population's exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health. Furthermore, industrial hygiene refers to the minimization, so far as is reasonably practicable, of the causes of health hazards inherent in the working environment."¹⁷⁷ The Committee has clarified that a government will violate its obligation to protect when it fails to take all necessary measures to safeguard persons within its jurisdiction from infringements of their right to health by third parties. "This category includes such omissions as the failure to regulate the activities of individuals, groups or corporations so as to prevent them from violating the right to health of others; [and] the failure to protect ... workers from practices detrimental to health".¹⁷⁸

Children have the right to be protected from economic exploitation and "performing any work that is likely to be hazardous or to interfere with the child's

171. Email UNICEF child protection officer, 6 January 2015.

172. ILO Committee of Experts on the Application of Conventions and Recommendations, *Observation, Minimum Age Convention, 1973 (No. 138), Democratic Republic of the Congo*, adopted 2014, published 104th ILC session (2015).

173. International Covenant on Economic, Social and Cultural Rights (ICESCR), Articles 6 and 7; African Charter on Human and Peoples Rights (ACHPR), Article 15; and Convention on the Elimination of All Forms of Discrimination Against Women, Article 11.

174. Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 18: The Right to Work, UN Doc. E/C.12/GC/18, 6 February 2006, para 7.

175. CESCR, General Comment No. 18: The Right to Work, UN Doc. E/C.12/GC/18, 6 February 2006, para 10.

176. ICESCR, Article 12; and ACHPR, Article 16.

177. CESCR, General Comment No. 14: The right to the highest attainable standard of health (article 2), UN Doc. E/C.12/2000/4, 11 August 2000, para 15.

178. CESCR, General Comment No. 14: The right to the highest attainable standard of health (article 2), UN Doc. E/C.12/2000/4, 11 August 2000, Para 51.

education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development."¹⁷⁹ As noted earlier, the DRC is also a party to the Worst Forms of Child Labour Convention which requires governments to take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour.¹⁸⁰ Children are defined as all persons under the age of 18¹⁸¹ and 'the worst forms of child labour' comprises amongst others, "work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children."¹⁸² All persons have the right to education and the government must ensure that primary education is compulsory and available free to all.¹⁸³

The government of the DRC is failing to meet its obligations to protect people from abuses of their rights to and at work and health through its failure to put in place and enforce adequate safeguards for artisanal miners working in unauthorized areas. The government has historically encouraged artisanal miners but has failed to adequately recognise and protect the labour rights of all artisanal miners. It has not created sufficient ZEAs where artisanal miners can operate, leaving people in a situation where they have to work in unauthorized areas, often in unsafe working conditions in which they have high levels of exposure to chemicals which can be dangerous to their health. State officials are fully aware of and often present in these unauthorized mining

operations, and this report includes evidence of state officials extorting illegal payments from artisanal miners, while turning a blind eye to the unsafe conditions in which miners work. The government should create more ZEAs and regularise unauthorized mining areas, wherever this is possible. Where this is not possible for safety or other considerations, the government should support artisanal miners in finding other authorized sites and help create alternative employment options. It should extend and enforce labour and safety protections, and provide support in realising these protections, to all artisanal miners. The government has failed to put in place an adequate system to monitor and enforce the labour standards that exist, including on the worst forms of child labour. There continues to be a serious gap between the age of compulsory education and the minimum age of employment, increasing children's vulnerability to ending up in the worst forms of child labour. The government has yet to remove financial and other barriers that children face in accessing primary education, and to ensure that all children are able to access free and compulsory primary education. It is essential that the government adopt and implement the national action plan to eliminate the worst forms of child labour, as a matter of urgency.

The DRC has ratified ILO Convention 81, which requires states to have an adequately resourced labour inspection system to ensure the protection of workers.¹⁸⁴

179. *Convention on the Rights of the Child, Article 32; and ICESCR, Article 10. The DRC is also a party to the ILO Minimum Age Convention (No. 138)* which requires governments ensure that no child under 18 is subject to any employment which, by its nature or the circumstances in which it is carried out, is likely to harm the health and safety of children.

180. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 1.

181. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 2.

182. ILO, *Worst Forms of Child Labour Convention (No. 182)*, Article 3 (d).

183. ICESCR, Article 13; *Convention on the Rights of the Child*, Article 28; and ACHPR, Article 28; and *Convention on the Elimination of All Forms of Discrimination Against Women*, Article 10.

184. ILO, *Labour Inspection Convention (No. 81)*, 1947 (available at http://www.ilo.org/dyn/normlex/en/f?p=1000:12100:0::NO:12100:P12100_INSTRUMENT_ID:312226) (accessed 7 January 2016)

3. DUE DILIGENCE: A CORPORATE INTERNATIONAL HUMAN RIGHTS STANDARD

Companies have a responsibility to respect human rights wherever they operate in the world. Their responsibility is laid out in the UN Guiding Principles on Business and Human Rights (UNGPs).¹⁸⁵ The corporate responsibility to respect human rights exists independently of a state's ability or willingness to fulfil its own human rights obligations.¹⁸⁶ This means that if a state where a company operates, such as the Democratic Republic of the Congo (DRC), lacks the necessary regulatory framework or is unable or unwilling to enforce applicable laws to protect human rights from abuse, the company must still act to ensure respect for human rights in their operations.

The UNGPs require that companies "do no harm" or, in other words, take pro-active steps to ensure that they do not cause or contribute to human rights abuses within their global operations and respond to any human rights abuses when they do occur. To

"know and show" that they comply with their responsibility to respect human rights, companies must carry out human rights due diligence. This is a process "to identify, prevent, mitigate and account for how they address their impacts on human rights."¹⁸⁷ This responsibility extends to companies' global mineral supply chains. Therefore, in line with current international standards, it is expected that all companies that purchase cobalt, or components that contain it, must conduct supply chain due diligence.

The Organisation for Economic Co-operation and Development (OECD) has provided a practical guide for how such due diligence should be carried out through its Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance).¹⁸⁸ In 2010, 34 OECD member states approved the OECD Guidance.¹⁸⁹ The International Conference on the Great Lakes Region (ICGLR), a regional body, including the DRC, then endorsed it.¹⁹⁰ Nine non-OECD members have also adhered to the OECD Guidance.¹⁹¹ More recently, China recognized the guidance as an international standard for conducting responsible mineral supply chain due diligence.¹⁹²

The widespread adoption of the OECD Guidance points to a growing global recognition that companies should carry out responsible supply chain practices when sourcing minerals from conflict affected or high-risk areas. The application of this standard to

185. The UNGPs were developed by John Ruggie, the former Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises. They were endorsed by the UN Human Rights Council in 2011. UN Office of the High Commissioner for Human Rights, *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework* (2011) UN Doc HR/PUB/11/04, available at www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf - (accessed 18 December 2015) (UNGPs).

186. UNGPs, Commentary to Principle 11.

187. UNGPs, Principle 15(b) and 17. These principles have also been reflected in the Human Rights Chapter of the revised OECD Guidelines for Multinational Enterprises. As of 2011, this contains a human rights chapter detailing the due diligence steps companies must take to ensure they respect human rights in their global operations. OECD Guidelines for Multinational Enterprises (2011) available at: <http://mneguidelines.oecd.org/text/>

188. Currently, detailed supplements exist for tin, tantalum, tungsten (the "3Ts") and gold. See OECD, *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Second Edition*, 2013, available at www.oecd.org/corporate/mne/GuidanceEdition2.pdf (accessed 18 July 2015) (OECD Guidance); OECD, *Recommendation of the Council on Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas*, 2012, available at webnet.oecd.org/OECDACTS/Instruments/ShowInstrumentView.aspx?InstrumentID=268&InstrumentPID=302&Lang=en&Book=False (accessed 18 July 2015).

189. <http://www.oecd.org/corporate/mne/mining.htm> (accessed 18 December 2015).

190. Lusaka Declaration, adopted on 15 December 2010; these states include: Angola, Burundi, Central African Republic, Republic of Congo, Democratic Republic of Congo, Kenya, Rwanda, Sudan, Tanzania, Uganda and Zambia, available at <http://www.oecd.org/daf/inv/mne/47143500.pdf> (accessed 18 December 2015).

191. These are Argentina, Brazil, Colombia, Costa Rica, Latvia, Lithuania, Morocco, Peru and Romania. See <http://mneguidelines.oecd.org/mining.htm> (accessed 18 December 2015). In addition, current efforts are being undertaken by the OECD to encourage the implementation of the OECD Guidance to mining companies operating in India.

192. The China Chamber of Commerce of Metals, Minerals and Chemicals Importers & Exporters, *Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains*, 2 December 2015, p. 6-7, available at <http://mneguidelines.oecd.org/chinese-due-diligence-guidelines-for-responsible-mineral-supply-chains.htm> (accessed 18 December 2015).

companies domiciled and/or operating in the OECD Member States, endorsing States and adhering states referenced above is clear. For those companies domiciled and/or operating in other countries, the OECD Guidance can be used to show how the UNGPs can be put into practice by companies sourcing minerals as its due diligence framework is consistent with that of the UNGPs. While the OECD Guidance is not legally binding, it gives companies more detailed instructions on the steps required to conduct human rights due diligence when extracting or sourcing from conflict-affected or high-risk areas. All countries, whether they are OECD members or not, should act in line with this guidance. As illustrated above, many have already stated their support for it.

The purpose of the OECD Guidance is to ensure that companies are not profiting from, or contributing to, serious human rights abuses in the mines that they source from, or anywhere else along their supply chains. The OECD Guidance also aims to ensure that companies are transparent about what they are doing to identify and address human rights issues. Accordingly, companies must be able to demonstrate that they source their minerals responsibly. What constitutes responsible action is provided by the OECD Guidance itself and varies depending on the company's position in the supply chain. A model supply chain policy is annexed to the OECD Guidance that lists serious abuses which companies should be aware of and prepared to address.¹⁹³ This is intended to provide a "common reference for companies"¹⁹⁴ and as such the list is not exhaustive of all human rights risks that a company may face.

DUE DILIGENCE AND THE TRADE IN MINERALS

The OECD Guidance applies to all minerals and all companies throughout the mineral supply chain and sets out the five steps that companies should take to ensure they respect human rights and avoid financing conflict when sourcing minerals from conflict-affected or high-risk areas.¹⁹⁵ The OECD Guidance defines due diligence as "an on-going, proactive and reactive process through which companies can ensure that they respect human rights and do not contribute to conflict."

The OECD Guidance is stated to apply to all conflict-affected and high-risk areas. It defines a high-risk area as one that

"...may include areas of political instability or repression, institutional weakness, insecurity, collapse of civil infrastructure and widespread violence. Such areas are often characterised by widespread human rights abuses and violations of national or international law."¹⁹⁶

According to the OECD's definition, the region of southern DRC featured in this report (previously known as Katanga) would constitute a "high-risk area". This is because of the presence of factors including political instability, institutional weaknesses, insecurity, lack of protections for human rights, and intermittent episodes of violence.¹⁹⁷

The practical five-step framework for supply chain due diligence set out in the OECD Guidance states that companies should: establish strong company management systems; identify and assess risks in the supply chain; design and implement a strategy

193. OECD Guidance, Annex II: Model Supply Chain Policy, p. 20, section 1. States that "...we [companies] will not tolerate nor by any means profit from, contribute to, assist with or facilitate ... iii) the worst forms of child labour."

194. OECD Guidance, Annex II: Model Supply Chain Policy, p. 20 Footnote1.

195. OECD Guidance, p. 3; OECD, *Recommendation of the Council on Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas*, 17 July 2012.

196. OECD Guidance, p. 13.

197. For an assessment of human rights conditions in the DRC, see UN General Assembly, *Third joint report of seven United Nations experts on the situation in the Democratic Republic of the Congo*, March 9, 2011, available at http://www.un.org/en/ga/search/view_doc.asp?symbol=A/HRC/16/68 (accessed 18 December 2015).

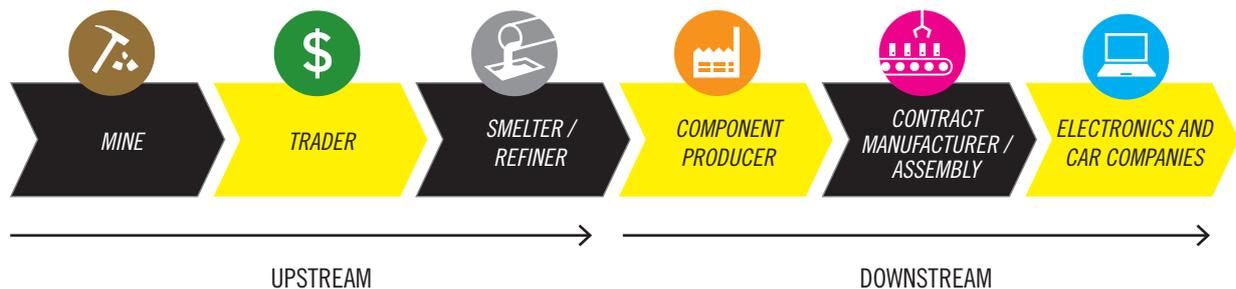
to respond to identified risks; carry out independent third-party audits of supply chain due diligence at identified points in the supply chain; and publicly report on supply chain due diligence policies and practices.¹⁹⁸

The OECD recognizes that companies at different stages of the supply chain have different responsibilities. It divides these into two categories: so-called "upstream" and "downstream" companies. Upstream companies include smelters and traders in the country where the mineral is found (i.e. buying houses and international traders who purchase and process cobalt in the DRC). Downstream companies include

all those companies that buy the cobalt, or manufacture or sell components or products that contain cobalt, after it has been processed. These include the brands that eventually sell products to the consumers.

The OECD Guidance also includes detailed, specific due diligence guidance for the tin, tantalum and tungsten as well as gold (often referred to as "3T and gold") sectors, tailored to upstream and downstream companies. The 3T supplement is relevant for the cobalt supply chain since the ores also go through a smelting process, unlike gold, which does not.

Flow chart of generic supply chain



UPSTREAM COMPANY RESPONSIBILITIES

Upstream companies (as defined above) are expected under the OECD Guidance to trace the source of the mineral back to the point of extraction, mapping the circumstances of its extraction, trade, handling and export. They should establish "on-the-ground assessment teams...for generating and sharing verifiable, reliable, up-to-date information on the qualitative circumstances of mineral extraction,

trade, handling and export."¹⁹⁹ Upstream companies should provide the information that they gather to their downstream customers.

Additionally, these upstream companies should take steps to identify, assess and manage human rights abuses in their supply chain. For example, they should "minimise the risk of exposure of artisanal miners to abusive practices, by supporting host countries governments' efforts for the progressive professionalization and formalisation of the artisanal sector."²⁰⁰

198. OECD Guidance, p. 17-19.

199. OECD Guidance, p. 32.

200. OECD Guidance, p.27.

DOWNSTREAM COMPANY RESPONSIBILITIES

“Downstream” companies (as defined above) should be able to trace the cobalt in their products back to the company which refined it. Unlike upstream companies, they are not expected under the OECD Guidance to trace the cobalt in their products all the way back to the mines in the DRC. Downstream companies should instead “review the due diligence process of the smelters/refiners in their supply chain and assess whether they adhere to due diligence measures put forward in the OECD Guidance.”²⁰¹ They should then take steps to mitigate any identified risks, for example by working with the smelter or refiner to improve their due diligence performance and practices. These activities can be undertaken with other suppliers in the industry or through industry-wide initiatives, although each company remains responsible for its own due diligence.

With regards to responding to human rights abuses, the OECD Guidance requires downstream companies to use their leverage over upstream suppliers “who can most effectively and most directly mitigate the risks of adverse impacts.”²⁰²

RESPONSIBILITY OF ALL COMPANIES IN THE SUPPLY CHAIN TO TAKE CORRECTIVE ACTION

The UNGPs additionally make clear that companies have a responsibility to mitigate and take corrective measures for the victims if they have failed to respect human rights at any point during their

operations. This requires that a company do more than simply discontinuing a trading relationship with a supplier or embargoing DRC cobalt once human rights risks have been identified in the supply chain. Once this occurs, a company must itself take steps based on the situation, in cooperation with other relevant actors, such as its suppliers, other downstream companies, national authorities, NGOs, international agencies, and home state governments, to ensure that the harm suffered by workers and others affected by abuses are remediated. For example, this would mean putting in place a coordinated action plan with national authorities, and with the help of international agencies and NGOs as relevant, to remove children from hazardous work, ensure that children are able to access education, provide support to children and, as appropriate, their families, and to monitor the situation of the children. This responsibility to remediate continues even when a company suspends or discontinues a trading relationship with a supplier.²⁰³

BRINGING HUMAN RIGHTS SUPPLY CHAIN DUE DILIGENCE INTO LAW

No legal system in the world currently requires companies in the cobalt supply chain to carry out due diligence or disclose their efforts, despite limited legislation calling for disclosure of information on other minerals coming from the DRC and neighbouring countries.

In 2012, the DRC itself incorporated the OECD Guidance into national law for tin, tantalum, tungsten and gold, thereby requiring companies in the 3T and gold supply chain in the DRC to conduct due diligence.²⁰⁴ These minerals (often described as

201. OECD Guidance, p. 33.

202. OECD Guidance, p. 45.

203. OECD Guidance, Annex II: Model Supply Chain Policy, p. 20, section 2. Risk mitigation should be interpreted in conjunction with the corporate responsibility to remedy human rights abuses within their supply chain.

204. 204 Arrêté Ministériel n° 0057 du 29 février 2012 portant mise en oeuvre du Mécanisme Régional de Certification de la Conférence Internationale sur la Région des Grands Lacs “CIRGL” en République Démocratique du Congo, 2012, available at http://mines-rdc.cd/fr/documents/Arrete_0057_2012.pdf (accessed 18 December 2015) (Arrêté Ministériel n° 0057 du 29 février 2012).

“conflict minerals”) were chosen because of their documented links to armed groups and the fuelling of conflict in eastern DRC.²⁰⁵ Additionally, the OECD has produced detailed supplements which companies trading in these minerals in the DRC could follow. The Congolese law states that new minerals can be added to the list requiring mandatory due diligence, following a decision by the regional body, the International Conference on the Great Lakes Region (ICGLR).²⁰⁶

Currently, and until cobalt is added to this list, its trade within the DRC is governed by the Mining Code (2002). This requires all traders of cobalt within the DRC to hold valid licences, issued by the provincial government.²⁰⁷ Traders must keep records of every transaction, recording the date, place of origin (to the level of town, but not mine) and name of the seller as well as the quantity, quality and price of purchased or sold minerals.²⁰⁸ They are obliged to buy only from licensed artisanal miners.²⁰⁹ However, they are not obliged to ask any questions about the exact location of where the mineral was mined nor about the conditions of extraction, such as whether children were involved. These are obvious weaknesses in the law in that they do not require reporting nor disclosure of this type of information, which would be essential for identifying, preventing and mitigating against human rights risks associated with the extraction of and trade in cobalt.

The DRC is not the only State required under international human rights law to prevent corporate-related human rights abuses within its territory.

As discussed earlier, the OECD Guidance has been approved by all 34 OECD Member States and

endorsed by nine non-OECD countries and the eleven member states of the ICGLR. It has recently been recognized as an international standard on supply chain due diligence by China. Yet while it is currently the most instructive international standard on conducting responsible due diligence in mineral supply chains, it is not in itself legally binding.

States can however take steps to legally require compliance with the OECD Guidance. A major landmark in how downstream companies address their mineral supply chains came in January 2013.²¹⁰ This was when a US law came into force (known as the Dodd-Frank Act Section 1502) obliging certain US-listed companies to investigate their supply chains to check if the 3T and gold in their products are funding armed groups or fuelling human rights abuses in the DRC and neighbouring countries.²¹¹ These companies were also obliged to report publicly on this. As with the DRC’s law, this US legislation does not cover other minerals such as cobalt, although the scope of the law can be extended to “any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country.”²¹²

More recently, in October 2014, the OECD signed a Memorandum of Understanding with the Chinese Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters (CCCMC), in order to promote the OECD Guidance in China. The CCCMC has since published its own voluntary due diligence code.²¹³ This complements other Chinese regulatory measures that can be used for cobalt trading. Under Article 5 of the Measures for the Administration of Overseas Investment (“the Measures”), the Ministry of Commerce for the Government of the People’s Republic of

205. UN Security Council, *Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth in the Democratic Republic of the Congo*, 2001, available at http://www.un.org/en/ga/search/view_doc.asp?symbol=S/2001/357 (accessed 18 December 2015).

206. *Arrêté Ministériel n° 0057 du 29 février 2012*.

207. DRC Mining Code (2002), Articles 116-7.

208. DRC Mining Regulations (2003), Article 250.

209. DRC Mining Code (2002), Article 116.

210. Although the Dodd-Frank Act was passed in January 2010, companies were only required to comply with section 1502 once the US Securities & Exchange Commission issued a final implementing rule – this rule came into effect in January 2013.

211. Section 1502, Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010. http://www.cftc.gov/ucm/groups/public/@swaps/documents/file/hr4173_enrolledbill.pdf (accessed 18 December 2015) (Section 1502, Dodd-Frank Wall Street Reform and Consumer Protection Act).

212. Section 1502, Dodd-Frank Wall Street Reform and Consumer Protection Act).

213. The China Chamber of Commerce of Metals, Minerals and Chemicals Importers & Exporters, *Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains*, 2 December 2015, available at: <http://mneguidelines.oecd.org/chinese-due-diligence-guidelines-for-responsible-mineral-supply-chains.htm> (accessed 18 December 2015).

China (MOFCOM) and its provincial departments are responsible for regulating foreign investment by Chinese companies.²¹⁴ In this capacity, they manage and oversee the operations of Chinese companies that have been certified to invest overseas. This includes the ability to evaluate whether a company is performing its "social responsibilities" as required under Article 20 of the Measures.²¹⁵

The European Union (EU) is currently considering legislation that could require companies in Europe to undertake due diligence on their 3T and gold supply chain in accordance with the OECD Guidance.²¹⁶

In addition to specific state-based measures around mineral supply chains, there is a separate duty on States to protect human rights in the context of business activity which has an extraterritorial dimension. The UN Committee on Economic, Social and Cultural Rights has clarified that States have a duty to prevent third parties – such as companies – from violating human rights abroad, if they are able

to influence these third parties by legal or political means.²¹⁷ These States are typically, though not exclusively, the States in whose territory multinational companies are domiciled or headquartered (commonly referred to as the "home states"). The scope of this duty has been further defined in recent years through UN human rights mechanisms, and the work of international law experts.²¹⁸ In essence, States' extraterritorial obligations require that they take measures to prevent companies incorporated or headquartered in their jurisdiction from causing or contributing to human rights abuses in other countries.

The parameters of such regulation should include requirements that the company carries out adequate due diligence, discloses its policies and practices (including any identified risks and how they were managed) and acts upon it, with the express intention of preventing the company's operations in any country from causing or contributing to human rights abuses.

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214. "The Ministry of Commerce and the commerce departments in each province, autonomous region, directly administered municipality, separately listed planning cities, and the Xinjiang Production and Construction Corps (hereafter, "province-level commerce departments") are responsible for carrying out management and oversight of overseas investment." Measures for the Administration of Overseas Investment, Ministry of Commerce of the People's Republic of China, Article 5.
215. 'Companies shall require their enterprises investing overseas to observe the laws and regulations of the host location, respect local culture and traditions, perform social responsibilities, do well in environmental and labour protection and the development of company culture, and promote assimilation into the local community.' Measures for the Administration of Overseas Investment, Ministry of Commerce of the People's Republic of China, Article 20. See: Articles 26 and 27 for the role of MOFCOM.
216. European Commission, *Proposal for a Regulation of the European Parliament and of the Council setting up a Union system for supply chain due diligence self-certification of responsible importers of tin, tantalum and tungsten, their ores, and gold originating in conflict-affected and high-risk areas*, 2014, available at http://trade.ec.europa.eu/doclib/docs/2014/march/tradoc_152227.pdf (accessed 18 December 2015).
217. CESCR, General Comment 15 on the right to water, 2002, UN Doc. E/C.12/2002/11, para 33. Also CESCR, General Comment 19 on the right to the right to social security, UN Doc. E/C.12/GC/19, para 54.
218. Committee on Economic, Social and Cultural Rights, General Comment 14: The right to the highest attainable standard of health, UN Doc E/C.12/2000/4, 11 August 2000; CESCR General Comment 15; Committee on the Rights of the Child, General Comment 16 on State obligations regarding the impact of the business sector on children's rights, paras 43 and 44; Committee on the Elimination of Discrimination against Women, General Recommendation No. 28, para 36; also see: Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights available at: http://www.etoconsortium.org/nc/en/main-navigation/library/maastricht-principles/?tx_drblob_pi1%5BdownloadUid%5D=23 (accessed 18 December 2015).

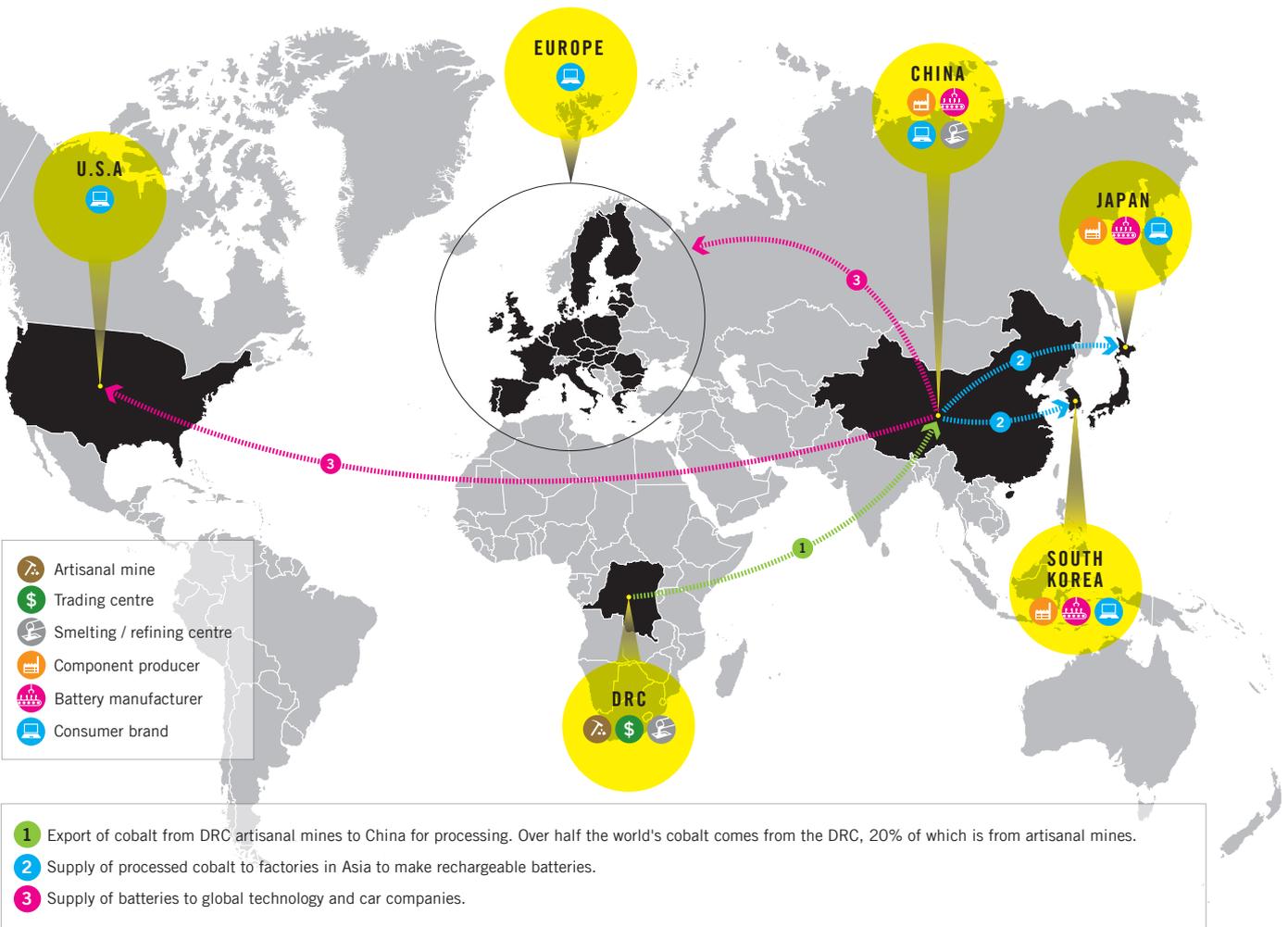
4. THE COBALT SUPPLY CHAIN: ABSENCE OF DUE DILIGENCE FROM MINE TO MARKETPLACE

"A stable supply of low-cost raw material of cobalt ore is one of the key competitive advantages to compete in the cobalt industry"

Zhejiang Huayou Cobalt Company Limited.²¹⁹

This chapter outlines the findings of an Amnesty International and Afreewatch investigation into the global trade of cobalt that is mined in Kolwezi (including Kasulo and Kapata). The chapter traces the likely routes that this mineral takes from the artisanal mines in the Democratic Republic of the Congo (DRC) to the companies at the end of the supply chain, which include many of the world's most prominent brands. It examines whether companies in this supply chain are conducting human rights due diligence to an international standard (see Chapter 3 for what this should entail). The first section of the chapter looks at the "upstream" companies in the supply chain (i.e. from the mine to the smelter). The second section examines the "downstream companies" (i.e. from the smelter to the retailer).

Movement of cobalt from artisanal mines in the DRC to the global market



219. Zhejiang Huayou Cobalt Co., Ltd (Huayou Cobalt), *Prospectus for First Phase of Short-term Financing Bills of 2014*, May 2014, p. 66, (translated by Amnesty International), available at http://pg.irj.com.cn/acc/CN_DISC/BOND_NT/2014/05/28/ls0000000000009h43j.pdf (accessed 7 January 2016) (Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*).

Amnesty International and Afreewatch researchers pieced together the upstream and downstream elements of the cobalt supply chain from in-country research and corroborating evidence. Starting with the specific locations at which ore is mined, researchers identified companies in the upstream supply chain through interviews with government officials, traders and miners. Researchers tracked sacks of cobalt ore that had been mined in artisanal mines in Kolwezi to the market where the mineral is traded. From this point, the smelted material is typically exported out of the DRC to China via a port in South Africa. Researchers analysed corporate materials, including investor documents, annual reports and websites, to identify what happens next, and identified potential downstream companies. Researchers wrote to each of those companies named in this report, and have included details from their responses (excerpts are provided in the Annex).

To Amnesty International and Afreewatch’s knowledge, this is the first time a cobalt supply chain (from mine to retailer) has been tracked in this way. The research undertaken for this report shows that there is very little information available that links together all of the different actors and companies in the supply chain.

TIERS OF THE COBALT SUPPLY CHAIN

Based on Amnesty International and Afreewatch’s research in the former province of Katanga, there are at least seven steps from the artisanal mines of the DRC to the end of the supply chain.

The first step in the supply chain is the point of extraction, which involves the artisanal miners themselves. As discussed earlier in the report, the adult miners then sell directly to licensed buying houses. Children interviewed for this report also told researchers that they sold their minerals to adult miners or small scale traders who then took their produce to sell to these same licensed buying houses. In Kolwezi, the majority of these buying houses are grouped together at the market at Musompo, on the city outskirts. These licensed trading houses then sell to a number of larger companies, which operate smelters and export the processed ore.²²⁰

Research by Amnesty International and Afreewatch found that one of the largest of these companies in Kolwezi is Congo Dongfang Mining International SARL (CDM). This company is a 100 per cent owned subsidiary of China-based Zhejiang Huayou Cobalt Company Ltd (Huayou Cobalt), one of the world’s largest manufacturers of cobalt products.²²¹ CDM is a smelter and therefore processes the ore before exporting it to Huayou Cobalt in China which then processes it further.²²²

Flow chart of the cobalt supply chain



220. The company which smelts the cobalt is in a key position in the supply chain (often referred to as the “choke point”). As the point at which minerals are processed before being incorporated into components and other products, it is generally seen as the best point at which a company can track the mineral and the conditions of its extraction and trading from the mine site through to local suppliers (i.e. occurrence of human rights abuses linked to the extraction and movement). As discussed in Chapter 3, the smelter itself should be able to demonstrate that it has sourced the mineral responsibly including by taking steps to identify and address human rights abuses within that part of the chain. This information should be made available to downstream companies in its supply chain.

221. Huayou Cobalt, *Annual Report 2014*, p. 20, (translated by Amnesty International), available at <http://www.huayou.com/downloadRepository/eda46c8c-448c-40df-8efa-a24bcfb76446.pdf> (accessed 7 January 2016).

222. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 66.



Buying houses at the Musompo market on the outskirts of Kolwezi, where artisanal miners sell the cobalt and copper they have mined in the artisanal mines surrounding the city, May 2015. © Amnesty International and Afrewatch

According to Huayou Cobalt corporate documents, which list the company's main customers, a significant amount of the cobalt products it sells are used in the manufacture of rechargeable lithium-ion (Li-ion) batteries, which power electronic devices such as mobile phones, laptops and cameras, as well as electric vehicles.²²³ According to its corporate documents, Huayou Cobalt sells to battery component manufacturers in China and South Korea. In turn, these companies sell to battery manufacturers, which then sell on to well-known consumer brands.

I. UPSTREAM

FROM MINES TO TRADERS

Researchers observed that most of the cobalt extracted from the artisanal mines in Kolwezi is traded at the Musompo market, 15 kms from the

city. The DRC government established the market in 2013, relocating copper and cobalt buying houses (*maisons d'achat* or *comptoirs*) from built up areas within the city, to ease congestion and pollution levels.²²⁴ These buying houses are licensed to trade in cobalt. Today, there are more than 200 of them located there, mostly owned by Chinese individuals, according to a government official.²²⁵ In addition to those at Musompo market, there are also such trading houses located close to individual mine sites.²²⁶

There is a constant stream of motorcycles, minibuses, cars and trucks taking sacks of cobalt ore from the artisanal mines of Kolwezi to the Musompo market. Amnesty International and Afrewatch researchers followed vehicles from the mining area of Kasulo to the market. Researchers witnessed licensed buying houses purchasing minerals directly from the artisanal miners.

223. Huayou Cobalt, *Annual Report 2014*, p. 12; and *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 67.

224. Le Potential, *Kolwezi : Les Entrepôts De Minerais Déplacés Loin Des Habitations*, 6 August 2013, available at http://www.lepotentialonline.com/index.php?option=com_content&view=article&id=1810:kolwezi-les-entrepots-de-minerais-deplacés-loin-des-habitations (accessed 7 January 2016).

225. Amnesty International interview with SAESSCAM, Kolwezi, 11 May 2015.

226. Researchers observed these in Kapata and Kambove.



A car weighed down by sacks of mineral ore on its way to the market at Musompo. There is a constant stream of motorcycles, minibuses, cars and trucks taking sacks of cobalt ore from the artisanal mines of Kolwezi to the Musompo market, May 2015. © Amnesty International and Afrewatch



A miner on a motorbike transports sacks of mineral ore to the Musompo market on the outskirts of Kolwezi, May 2015. © Amnesty International and Afrewatch

In carrying out the investigation, Amnesty International and Afreewatch researchers observed activities in four buying houses – three in Musompo and one in Kapata. In the three buying houses in Musompo, the researchers interviewed staff with the permission of the Chinese owners.²²⁷ In each buying house, individual miners queued to sell sacks of ore containing cobalt. Staff weighed the sacks and tested the ore's grade to establish a price.²²⁸ In two of the buying houses, staff recorded the names of the sellers, the area where they said the minerals had come from, as well as the weight and value of the ore. As explained in Chapter 3, buying houses are required to buy from licensed artisanal miners, but are not obliged by law to ask any other questions such as the exact location of where the mineral was mined nor about the conditions of extraction, such as whether children were involved.²²⁹ In one of the buying houses, the foreman said that they did not even record the place where the cobalt had been mined.²³⁰

Staff at the three Musompo buying houses visited by researchers said that they bought minerals from all the different sites in and around the city of Kolwezi.²³¹ In one buying house, miners queuing to sell their goods told researchers they had come from Kasulo and Musonoie.²³² These are two areas where researchers had documented child labour and hazardous working conditions.²³³ Similarly, researchers observed that staff at the buying house at Kapata, located outside of Musompo market but near the mining sites, could not have failed to see that the minerals they were buying had been handled by children, given that the lake in which the children carry out activities related to artisanal mining is directly in front of the buying house.

Miners at Kasulo told researchers that they sold to different buying houses in Musompo market depending on which gave them a “good price.”²³⁴ Children who had collected rocks in Musonoie and other industrial mining concessions said that they did not sell directly to licensed buying houses in Musompo market or elsewhere, but to small-scale traders at the mine sites where they worked. In determining the price that the children would receive for the cobalt ore, these small scale traders did not test or weigh the ore but gave them a price based on their estimation of quality and weight.²³⁵

CONGO DONGFANG MINING INTERNATIONAL (CDM)

Multiple sources identified Congo Dongfang International Mining SARL (CDM), as the largest single buyer of cobalt that originates in the artisanal mines in and around Kolwezi. According to a Ministry of Mines official in Kolwezi, “CDM is the giant.”²³⁶ A Chinese businessman managing one of the Musompo buying houses said that CDM was so big, “it is like America.”²³⁷ A CDM employee at its warehouse close to Musompo market said that the company sends three to four trucks a day of cobalt and copper ore from Kolwezi to Lubumbashi where the company is headquartered and has a smelting operation.²³⁸ The Ministry of Mines official also said that on an average day, a total of up to 15 trucks carrying up to 25 tonnes of cobalt or copper for many different firms, makes that journey.²³⁹ Based on these figures from CDM and the Ministry of Mines, at least one in five of the trucks carrying ore from Musompo is owned by CDM.

227. Amnesty International interviews, Musompo, 14 May 2015.

228. All of the miners and petty traders that Amnesty International and Afreewatch researchers interviewed complained that the buying houses in Musompo and elsewhere regularly cheated them out of a fair price for their goods. They complained that the buying houses dictated the value of the ore, after weighing it and testing its grade (using a machine called a Metorex). The miners and traders all complained that they had no way of challenging the buying houses' results because they could not test for themselves the grade or value of the ore. Amnesty International is unable to verify these complaints. The Chinese owner of one buying house in Musompo denied he tricked the miners, explaining that the quality of the ore coming from Kasulo had dropped markedly since mining had started there in the summer of 2014. Amnesty International interview, Musompo, 14 May 2015.

229. DRC Mining Code (2002), Articles 116 and 117.

230. Amnesty International interviews, Musompo, 14 May 2015.

231. Amnesty International interviews, Musompo, 14 May 2015.

232. Amnesty International interviews, Musompo, 14 May 2015.

233. As mentioned earlier in this report, Kasulo is the residential neighbourhood of Kolwezi where cobalt has been mined through illegal hand-dug tunnels since 2014 and where researchers observed children working. Musonoie is an industrial mining concession, which artisanal miners, including children, illegally enter to gather rocks containing copper and cobalt.

234. Amnesty International interviews, Kolwezi, 11-13 May 2015.

235. Amnesty International interviews, Kolwezi, 13 May 2015.

236. Amnesty International interview, Kolwezi, 12 May 2015.

237. Amnesty International interview, Kolwezi, 13 May 2015.

238. Amnesty International interview, Kolwezi, 12 May 2015.

239. Amnesty International interview, Kolwezi, 12 May 2015.



On 14 May 2015, researchers saw one of CDM's trucks being loaded with sacks of ore at the market in Musompo. Researchers then followed the truck from Musompo market back to the company's warehouse, which is only 5kms from the market, May 2015. © Amnesty International and Afrewatch



A signboard outside CDM's warehouse, which is on the road between Kolwezi and Musompo market, advertises in French that it "buys copper and cobalt products at a good price", May 2015. © Amnesty International and Afrewatch

Staff in all of the four buying houses that Amnesty International and Afrewatch researchers visited said that CDM was one of their clients. CDM operates a number of distinctively-coloured orange trucks and researchers saw these trucks being loaded with sacks of ore at the market in Musompo. On 14 May 2015, researchers followed one of CDM's trucks from Musompo market back to its warehouse, which is only 5kms from the market. A security guard at CDM's warehouse told the researchers that the sacks contained cobalt and confirmed that the truck had come from Musompo market.²⁴⁰ When researchers asked to speak to the manager of the warehouse, the office secretary said that he was not available as he was in Musompo buying minerals.²⁴¹

A signboard outside CDM's warehouse, which is on the road between Kolwezi and Musompo market, advertises in French that it "buys copper and cobalt

products at a good price." The fact that the sign is in French suggests that it is advertising to Congolese miners or small-scale traders who are Congolese and speak French, rather than to the owners of the licensed buying houses who are Chinese. Some of the Chinese business people interviewed for this report did not speak French. In a letter to Amnesty International, CDM's parent company (Huayou Cobalt) denied that this signboard existed.²⁴²

According to investor documents publicly released by Huayou Cobalt, CDM buys from "local mining companies or brokers in DR Congo or through its own procurement network."²⁴³ The document explains that CDM pays for the cobalt with cash.²⁴⁴ It then carries the cobalt on trucks to Lubumbashi where, as previously stated, CDM is headquartered and has a smelting operation.

240. Amnesty International interview, Musompo, 14 May 2015.

241. Amnesty International interview, Musompo, 14 May 2015.

242. Letter dated 21 August 2015 (see Annex).

243. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 66.

244. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 69.

FROM CONGO TO CHINA – HUAYOU COBALT

In Lubumbashi, CDM processes the low-grade cobalt into crude cobalt hydroxide before shipping it, via Durban in South Africa, to Zhejiang province on the eastern seaboard of China, where its parent company Huayou Cobalt is based.²⁴⁵ CDM is a wholly and directly owned subsidiary of Huayou Cobalt. Huayou Cobalt also operates several industrial mines in the DRC. In the three years up to 2014, company documents show that CDM provided Huayou Cobalt with more than 40 per cent of the company's total production of cobalt.²⁴⁶

Once the processed cobalt arrives in China, Huayou Cobalt processes it further, turning it into a range of different chemical products.²⁴⁷ The company claims to be China's largest manufacturer of cobalt products, and the third largest in the world.²⁴⁸

Huayou Cobalt is a publicly traded company, listed on the Shanghai Stock Exchange. In 2013, it sold cobalt worth almost 1.5 billion yuan (US\$235 million),²⁴⁹ making a profit of almost 200 million yuan (US\$32 million).²⁵⁰

HUAYOU COBALT'S LINKS TO THE CHINESE AND DRC GOVERNMENTS

Huayou Cobalt, is a publicly traded company, but it has several ties to the Chinese government:

Though ownership of Huayou Cobalt remains primarily in private hands, around 24 per cent of the company is held by state-owned entities.²⁵¹ Huayou Cobalt's third largest shareholder, holding 10 per cent, is the China-Africa Development Fund.²⁵² This is a government fund that supports Chinese companies in Africa.²⁵³

The Chinese government has given the company millions of dollars in subsidies, and the state-owned China Export & Credit Insurance Corporation insures it.²⁵⁴

Huayou Cobalt is a minority shareholder in the strategically important Sicominex joint venture between the Congolese state-owned mining company Gécamines and a consortium of Chinese companies. The main shareholders are China Railway Group Limited and Sinohydro Corp, both state-owned companies. Huayou Cobalt bought a 5 per cent share in the joint venture in 2008.²⁵⁵ Huayou Cobalt also has, through its wholly-owned subsidiary, CDM, links to the DRC government. CDM has made several payments to the Congolese government through its "public interest activities." These payments were detailed in a letter sent to Amnesty International.²⁵⁶ As well as financing various infrastructure and charitable projects in Katanga, CDM donated US\$20,000 to the election campaign of President Joseph Kabila in 2011.

245. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 70.

246. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 70.

247. See Huayou Cobalt, *Product List*, available at http://en.huayou.com/products_list.html

248. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 70.

249. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 14.

250. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 57.

251. Huayou Cobalt, *2014 Annual Report*, p. 43.

252. Huayou Cobalt, *2014 Annual Report*, p. 43.

253. The China-Africa Development Fund, *Homepage*, available at <http://www.cadfund.com/en/NewsInfo.aspx?Nid=48> (accessed 26 November 2015)

254. These were worth 14,470,100 yuan (approx. US\$2.3m) in 2011, 12,458,400 yuan (US\$1.9m) in 2012 and 6,689,100 yuan (US\$1m) in 2013, Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 16.

255. *Sicomines Joint Venture Agreement*, 22 April 2008, available at http://mines-rdc.cd/fr/documents/convention_jv_gcm_cec_avenants.pdf (accessed 26 November 2015).

256. Letter dated 21 August 2015 (see Annex).



CDM's headquarters in Lubumbashi, where the company has a smelting operation. Ore bought from buying houses is brought here, where CDM processes the low-grade cobalt into crude cobalt hydroxide before shipping it, via Durban in South Africa, to Zhejiang province on the eastern seaboard of China, May 2015. © Amnesty International and Afrewatch

CDM / HUAYOU COBALT'S FAILURE TO CONDUCT DUE DILIGENCE

Given that both CDM and Huayou Cobalt act as a smelter in the cobalt supply chain researched in this report and that CDM is 100 per cent owned and managed by Huayou Cobalt, the two companies are treated as one (Huayou Cobalt) for the purposes of the analysis below.

As part of its responsibility to undertake human rights due diligence to an international standard, Huayou Cobalt is expected to understand exactly how the cobalt that it buys is extracted, handled, transported and traded (see Chapter 3). It should be able to identify where it is mined, by whom and under what conditions (including whether human rights abuses or any form of illegality are taking place). The company should have a system in place to be able to identify the chain of custody or trace the supply chain up to the mine site. This includes capturing the movement of the minerals, such as transportation routes. The company should check and assess if the buying houses and other upstream actors are conducting their own due diligence. As the smelter, Huayou Cobalt should also obtain third party audits of its due diligence efforts and make the results of these audits publicly available. It should also take steps to address any human rights abuses that it

identifies occurring at any point in its supply chain (for example, at the point of extraction).

Huayou Cobalt has been purchasing cobalt in southern DRC since 2006. It runs a large, well-staffed operation in the country, with offices in at least three cities (Lubumbashi, Likasi and Kolwezi). The dangerous conditions and frequent accidents in the artisanal mines, the presence of tens of thousands of child miners, and the DRC government's poor regulation of artisanal mining have all been well documented in recent years by the international and Congolese media, NGOs, governments and international bodies, as detailed in Chapter 2. The company has itself been the subject of criticism – in 2008, Bloomberg News published a story alleging that Huayou Cobalt bought cobalt that had been mined by children.²⁵⁷

Given the considerable attention focusing on these issues, the company must be aware of the poor working conditions in the cobalt artisanal mines and the issue of children working in the mining areas. It is certainly aware that cobalt is a substance that needs to be handled carefully, as researchers observed that CDM issues its own staff in the DRC with protective equipment, such as facemasks, boots, gloves and helmets.²⁵⁸

In July 2015, Amnesty International wrote to Huayou Cobalt to ask the following questions:

1. What supply chain due diligence policies and processes does Huayou Cobalt have in place to ensure that CDM's sourcing of cobalt from the DRC does not involve human rights violations, including the worst forms of child labour?
2. What measures does Huayou Cobalt take if it becomes aware of human rights abuses taking place in connection with its suppliers?
3. What steps has Huayou Cobalt taken to investigate the claims made in the 2008 Bloomberg report regarding CDM's purchasing of cobalt mined by children in artisanal mines in the DRC, and what was the outcome of this investigation? Were any

257. Simon Clark, Michael Smith, Franz Wild, *China Lets Child Workers Die Digging in Congo Mines for Copper*, Bloomberg News, 22 July, 2008, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aW8xVLQ4Xhr8> (accessed 18 July 2015).

258. Photo on file with Amnesty International.

changes made to CDM or Huayou Cobalt policies and processes?

4. What kind of information does Huayou Cobalt publicly report on the risks of labour and human rights abuses linked to its operations and on preventative or other measures that it is taking in response?
5. What is the volume and value of the cobalt that CDM buys from artisanal miners in the DRC each year?

In response, Huayou Cobalt explained that following the Bloomberg News report it had decided to stop buying directly from miners, and instead only purchased cobalt from licensed traders (for full reply see Annex).²⁵⁹ It stated that it had “rigorously selected” these suppliers, and has “reasonably presumed that the behaviours of suppliers comply with relevant regulations of the DRC and taken the corresponding social responsibilities.” The company advised that it has developed a code of conduct for these suppliers. Among other things, this obliges them to ensure that no children were employed “in the process of provision of goods or services to our company.”²⁶⁰

Huayou Cobalt also wrote that it visits its suppliers “from time to time” to examine employment conditions, and when staff visited two mines in 2014 they did not find any children. Finally, the company claimed that “some local residents of the DRC” fraudulently used its name to purchase minerals, damaging its reputation.

However, the company does not explain how it selects its suppliers nor if it traces all actors in the supply chain up to the mining areas. The company did not provide any details of whether it tries to ensure that its upstream suppliers conduct meaningful checks to identify the precise source of the minerals that they buy (e.g. where they come from and who was involved in the extraction) or the conditions under which they are mined. Under international standards on supply chain due diligence, Huayou Cobalt should be undertaking these checks and

taking steps to address the human rights abuses they identify as occurring – it is not enough for the company to put in place a code of conduct and then say it is “reasonably presumed” that their suppliers comply with local laws and social responsibilities. From what Amnesty International and Afreewatch researchers saw in four buying houses, Huayou undertakes no such checks and is taking no other action to address conditions at the mines – which it must be aware of for the reasons above. In its letter, there is no indication that it traces the cobalt supply chain to the mining areas itself. Huayou Cobalt also does not mention inspecting or addressing conditions in the unauthorized artisanal mining zones, such as Kasulo, even though its suppliers are buying cobalt that has been mined there.

In summary, Huayou Cobalt is failing to respect international human rights as required by the UN Guiding Principles and it is not implementing the five-step framework recommended in the OECD Guidance, despite the fact that the OECD Guidance has been recognised by the Chinese Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters as the “recognised international framework” to conduct mineral supply chain due diligence.²⁶¹ For all the reasons stated above, there is a high risk that Huayou Cobalt is buying (and subsequently selling) cobalt from artisanal mines in which children are engaged in hazardous labour, one of the worst forms of child labour, and where adult workers work in unsafe and hazardous conditions.

II. DOWNSTREAM

This section examines the companies at the downstream end of the supply chain. These begin with companies that are supplied with processed ore by Huayou Cobalt, and finish with well-known consumer brands that sell products containing cobalt. As previously discussed in Chapter 3, each of these downstream firms has a responsibility to undertake supply chain due diligence on their cobalt

259. Letter dated 21 August 2015.

260. Huayou Cobalt, *Code of Conduct for Suppliers*, (see Annex).

261. See Chapter 3.

supply chain, including by tracing the cobalt that they buy (directly or within components or products) back to the smelter, which in this case is Huayou Cobalt.

As part of that supply chain due diligence, each of these downstream companies should be checking that Huayou Cobalt is carrying out practices to confirm the chain of custody and the conditions

under which the minerals were traded and extracted. Downstream companies should also be responding to any human rights risks they identify with respect to their smelter. Amnesty International wrote to each of the companies named in this section, and their replies are summarised below and provided in greater detail in the Annex.



POTENTIAL DRC COBALT SUPPLY CHAIN According to publicly available information

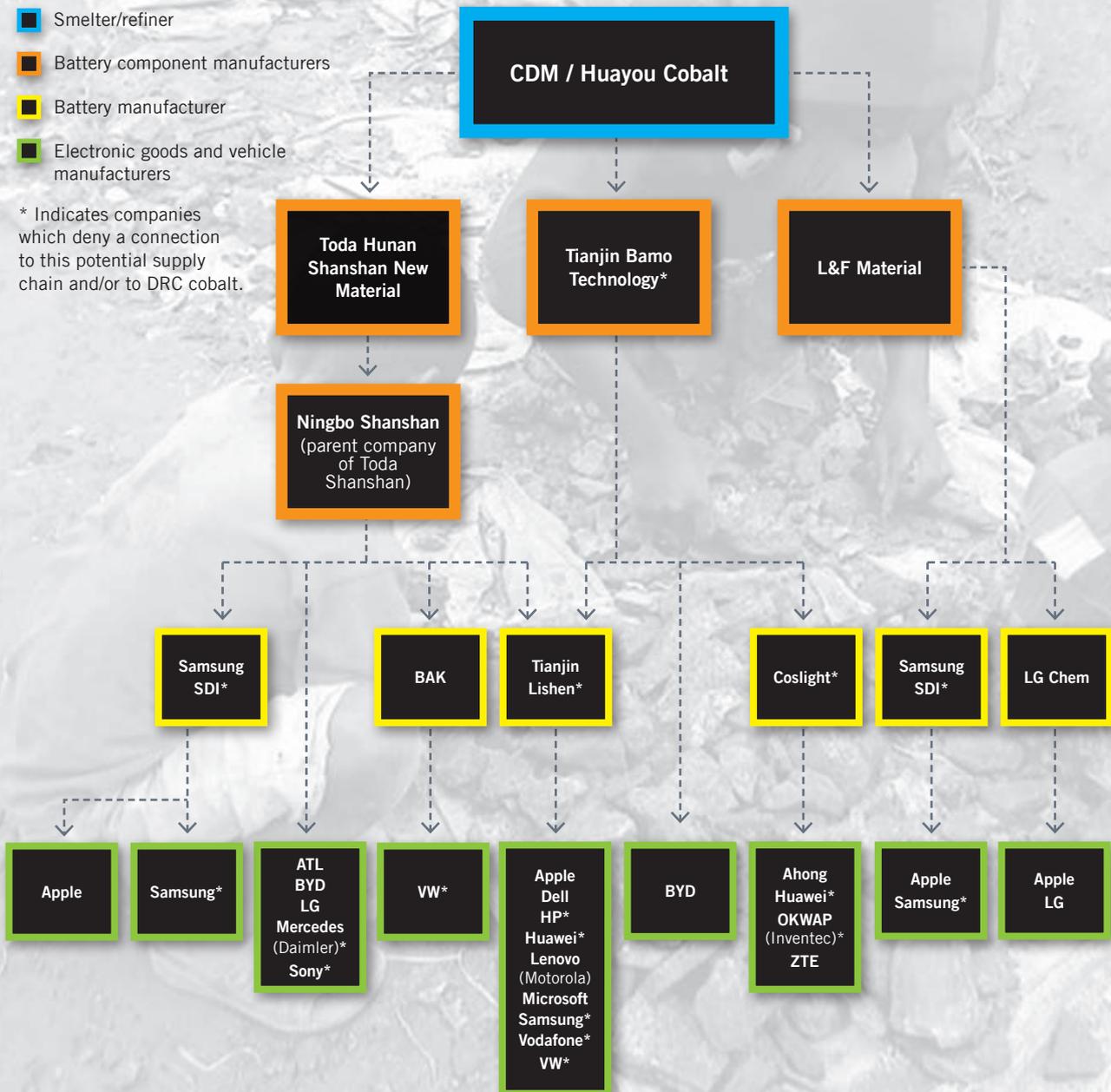
■ Smelter/refiner

■ Battery component manufacturers

■ Battery manufacturer

■ Electronic goods and vehicle manufacturers

* Indicates companies which deny a connection to this potential supply chain and/or to DRC cobalt.



HUAYOU COBALT'S BATTERY COMPONENT MANUFACTURER CLIENTS AND THEIR SUPPLY CHAINS

Huayou Cobalt boasts of having "sales networks covering the domestic market as well as major international markets including Japan, South Korea, Europe and the USA."²⁶² It also reported in its 2014 annual report, as well as on its website, that certain of its advanced cobalt products were undergoing evaluation and certification by Samsung SDI and LG Chem, two of the world's largest battery manufacturers.²⁶³

Huayou Cobalt named its three most important customers in a 2014 bond prospectus as well as its 2014 annual report.²⁶⁴ These were lithium-ion battery component manufacturers in China and South Korea including:²⁶⁵

- **Toda Hunan Shanshan New Material**, a subsidiary of **Ningbo Shanshan Co Ltd** (Ningbo Shanshan) which was Huayou Cobalt's largest customer of its cobalt products, accounting for 13.54 per cent of cobalt sales, worth 197,432,900 yuan (US\$32 million) in 2013.²⁶⁶ In its 2014 annual report, Ningbo Shanshan said it was China's largest lithium-ion battery materials supplier.²⁶⁷
- **L&F Material Co.** (L&F), a South Korean firm, which accounted for 13.16 per cent of Huayou

Cobalt's sales, worth 192,001,500 yuan (US\$31 million), in 2013.²⁶⁸

- **Tianjin Bamo Science and Technology Co., Ltd** (Tianjin Bamo), a Chinese battery material supplier, which accounted for 13.13 per cent of sales, worth 191,489,400 yuan (US\$31 million), according to Huayou Cobalt.²⁶⁹

Amnesty International wrote to each of these companies and asked them to confirm if they purchase cobalt from Huayou Cobalt.²⁷⁰

- **Ningbo Shanshan** did not reply to Amnesty International's letter.
- **L & F** did not reply directly to Amnesty International's letter, but advised one of its clients, LG Chem, that the company had purchased cobalt oxide from Huayou Cobalt.²⁷¹
- **Tianjin Bamo** replied via two of its clients to deny purchasing from Huayou Cobalt. It wrote that it has "no business dealings" with the company.²⁷² This is despite Huayou Cobalt stating that Tianjin Bamo was one of its largest customers of cobalt products in 2011, 2013 and 2014.²⁷³ Tianjin Bamo provided no explanation for this disparity, nor any explanation as to why Huayou Cobalt would want to include false information in its investor documents.

Considering these responses collectively (one non-response, one confirmation and one assertion which lacks credibility) and the fact that they are listed in Huayou Cobalt's corporate filings, Amnesty International concludes that all three are likely customers of Huayou Cobalt and therefore part of the same cobalt supply chain.

262. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 70.

263. Huayou Cobalt, *Annual Report 2014*, p. 19; and "The Company's technology and research and development situation," available at http://www.huayou.com/science/&FrontComContent_list01-1342677884477ContId=37&comContentId=37&comp_stats=comp-FrontComContent_list01-1342677884477.html (accessed 24 November 2015).

264. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 6; and *Annual Report 2014*, p. 12.

265. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68.

266. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; and *Annual Report, 2014*, p. 12.

267. Ningbo Shanshan, *Annual Report, 2014*, p. 18, available at http://www.ssgf.net/pdf/600884_2014_n.pdf, (accessed 26 June 2015) (Ningbo Shanshan Co. Ltd., Annual Report 2014).

268. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; and *Annual Report, 2014*, p. 12.

269. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; and *Annual Report, 2014*, p. 12.

270. The letters also asked each company the following: 1. "What are the policies and practices that your company has in place to identify and prevent human rights abuses in your supply chains, particularly in relation to child labour (e.g. including specific guarantees that you seek from suppliers, checks, etc.)?" 2. "In the event that your company has detected human rights abuses in your cobalt supply chains in the past, particularly those involving child labour, what steps have you taken to address these?" 3. "What steps has your company taken to publicly disclose its human rights due diligence policies and practices (e.g. annual filings, posted on the website)?"

271. Letter from LG Chem, 13 November 2015 (see Annex).

272. Email from Tianjin Lishen Battery Co., Ltd., 4 November 2015, and Harbin Coslight Power Co., Ltd., 6 November 2015.

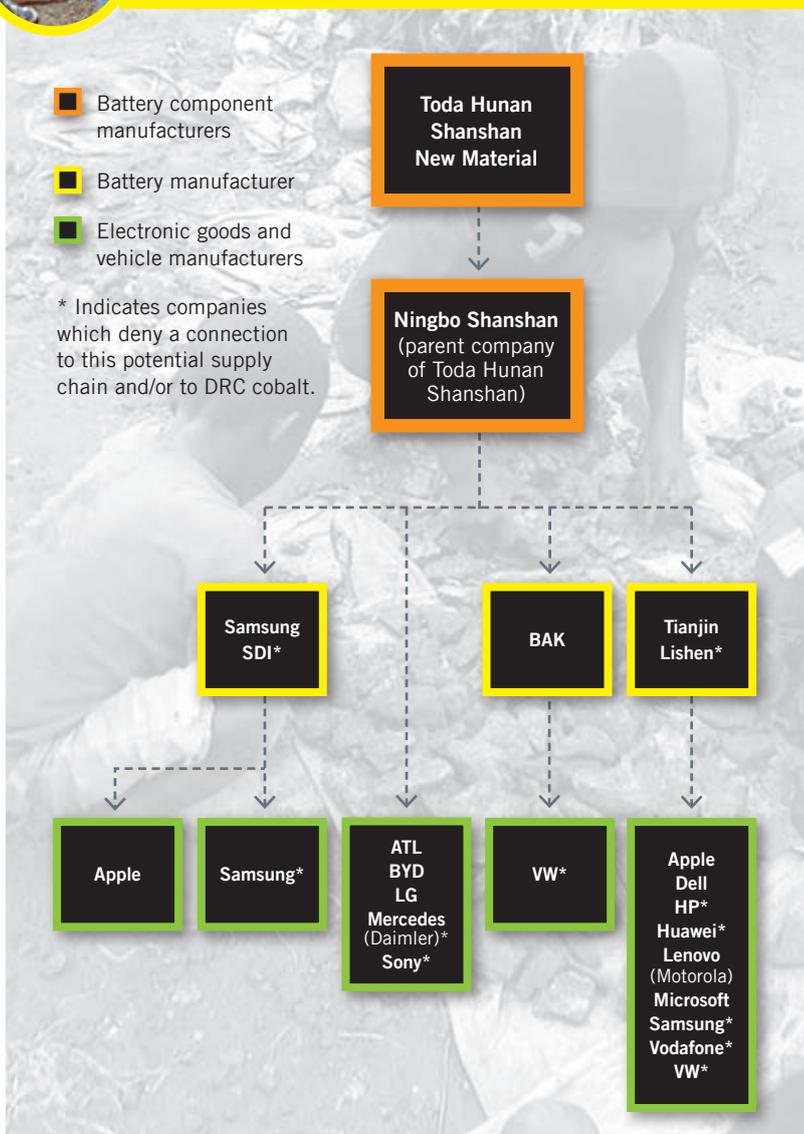
273. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; and *Annual Report, 2014*, p. 12.

These three companies (Ningbo Shanshan, L&F and Tianjin Bamo) sell their cobalt-containing battery components to battery manufacturers. These companies list the names of the battery manufacturers on their websites or in investor documents. The battery manufacturers, which are the next step in the chain, also list the names of their customers on their websites and, where available, in investor documents. Based on this information, Amnesty International

has traced potential actors at every stage of the process and written to each of these companies asking them: to confirm if their products contain DRC cobalt, if they sourced from Huayou Cobalt and/or one of the battery manufacturers publicly identified to be one of their suppliers, and to provide information on any human rights supply chain due diligence practices they carry out in relation to cobalt. Details of these replies are provided in the Annex.



POTENTIAL SHANSHAN COBALT SUPPLY CHAIN
According to publicly available information



NINGBO SHANSHAN'S POTENTIAL CUSTOMER NETWORK

In its 2014 annual report, Ningbo Shanshan named the following customers:²⁷⁴

"After many years of accumulation, the company has a stable and excellent customer base, including globally renowned enterprises such as SDI, SONY, BYD, ATL, LISHEN and BAK, and has entered to become the supply chain of world famous companies such as Apple and BENZ."

Ningbo Shanshan also stated on its website that it works in "a strategic cooperation with Samsung, LG, Sony and other famous international enterprises."²⁷⁵ However, no further details are provided by the company as to what this means.

Samsung SDI, a South Korean battery manufacturer, is a member of the Samsung group of companies.²⁷⁶ It has many clients, including Apple Inc. (Apple), which named Samsung SDI in its list of top suppliers in 2014.²⁷⁷ BYD Company Ltd. (BYD) is a leading Chinese

274. Ningbo Shanshan Co. Ltd., *Annual Report 2014*, p. 19.

275. Ningbo Shanshan Co. Ltd., About Us, available at <http://www.ssgf.net/aboutus.asp>, (accessed 26 June 2015).

276. See Samsung SDI homepage, available at <http://www.samsungsd.com/gateway>, (accessed 26 June 2015).

277. Apple Inc., *Supplier List 2015*, available at https://www.apple.com/euro/supplier-responsibility/b/generic/pdf/Apple_Supplier_List_2015.pdf (accessed 23 July 2015) (Apple Inc., *Supplier List 2015*).

manufacturer of electric vehicles which states on its website that it has clients around the world, including the USA, Canada, Brazil, India and the UK.²⁷ Amperex Technology Limited (ATL) is a Hong Kong battery manufacturer.²⁷⁹ China BAK Battery, Inc. (BAK) is a battery manufacturer, which states on its website that it supplied companies including the German car maker, Volkswagen (VW).²⁸⁰

Another Chinese battery manufacturer Tianjin Lishen Battery Joint-Stock Co., Ltd. (Tianjin Lishen) states on its website that its customers include Apple, Samsung, Motorola (which is owned by Lenovo), Dell, Hewlett-Packard Company (now known as HP Inc.), Microsoft Corporation (Microsoft), Vodafone, VW “and domestic industry leaders, such as Huawei.”²⁸¹ Tianjin Lishen is also on Apple’s list of top suppliers.²⁸²

ANALYSIS OF COMPANY RESPONSES

As stated above, Ningbo Shanshan listed the following as direct buyers of its battery components: Samsung SDI, Sony, ATL, BYD, Mercedes Benz (which is owned by Daimler AG (Daimler)), Tianjin Lishen and BAK.

Samsung SDI stated that it does not do direct business with CDM or Huayou Cobalt and that neither of the two companies are in Samsung SDI’s supply chain. It also stated that it does not have a business relationship with Ningbo Shanshan.²⁸³ However, Samsung SDI does accept that it is supplied by another company identified by researchers, L&F (see below). Samsung SDI further states that it is carrying out supply chain due diligence for the four so-called conflict minerals (tantalum, tin,

tungsten, and gold – the “3T and gold”), but not cobalt.²⁸⁴ The company therefore concludes that it does not know where the cobalt in its products comes from:

“In reality, it is very hard to trace the source of the mineral due to the suppliers’ nondisclosure of information and the complexity of the supply chains. Therefore it is impossible for us to determine whether the cobalt supplied to Samsung SDI comes from DRC Katanga’s mines.”

Sony wrote a brief reply to Amnesty International.²⁸⁵ It did not confirm or deny whether it sources components from Ningbo Shanshan. It wrote that:

“We take this issue seriously and have been conducting a fact-finding process. So far, we could not find obvious results that our products contain the cobalt originated from Katanga in the DRC.”

It provides no detail of what this “fact-finding process” consisted of, for example whether Sony traced the cobalt in its products back to the smelter, as required by prevailing international standards. It also did not provide any evidence that Sony has asked their smelters if they have sourced the cobalt responsibly i.e. identified and addressed human rights risks, such as child labour. On its website, Sony details its due diligence policy for the 3T and gold, but does not state that it conducts similar due diligence for other minerals such as cobalt.²⁸⁶ This suggests that the company does not in fact have in place a process (that meets international standards) for tracing the cobalt in its products.

278. BYD homepage available at <http://www.byd.cn/BYDEnglish/groupnews/index.jsp?pageNumber=1>, (accessed 26 June 2015).

279. ATL homepage available at <http://www.atlbattery.com/about/en/about-1.htm>, (accessed 26 June 2015).

280. BAK, China BAK to Supply Lithium-ion Batteries to FAW-Volkswagen Automotive Co., Ltd., 23 August 2012, available at http://www.bak.com.cn/news_detail.aspx?NewsCatelD=21&CatelD=21&NewsID=790 (accessed 20 December 2015).

281. Tianjin Lishen, *Company Profile*, available at <http://en.lishen.com.cn/> (accessed 29 June 2015).

282. Apple Inc., *Supplier List* 2015.

283. Letter from Samsung SDI, 23 November 2015 (see Annex).

284. See Chapter 3.

285. Email from Sony, 30 October 2015 (see Annex).

286. Sony, *Responsible Sourcing of Raw Materials*, available at http://www.sony.net/SonyInfo/csr_report/sourcing/materials/ (accessed 26 November 2015).

Daimler states that, "concerning the particular case at hand we can confirm that we neither source from the DRC or the mentioned companies directly."²⁸⁷ Daimler states that it does not "engage in any traceable mineral or commodity purchasing activities in the Democratic Republic of Congo." However the company then goes on to state that:

"Due to the high complexity of automotive supply chains, we are, however, not able to definitely confirm whether or not cobalt in our products originates from this region or from the mentioned companies at any stage within our supply chains."

Regarding its policy towards mineral supply chains, Daimler writes that it regularly reviews its suppliers, in order to "identify possible sustainability risks in our supply chain with regard to child labour, environmental protection, corruption prevention, violation of freedom of association or violations of human rights."²⁸⁸ However, Daimler provides no mention of conducting due diligence on its mineral supply chain to the standard established by the OECD.

Tianjin Lishen replied via one of its downstream customers, Huawei.²⁸⁹ Tianjin Lishen advised that "the cathode materials supplied to us by Toda Hunan Shanshan New Material Co., Ltd [subsidiary of Ningbo] hasn't used raw materials from Huayou Cobalt." However, it did not explain how it was able to confirm that this was the case. Huayou Cobalt publicly named Toda Hunan Shanshan New Material Co., Ltd as its largest customer of cobalt products in 2013.²⁹⁰

Companies identified to be further down Ningbo Shanshan's supply chain:

Apple did not directly answer Amnesty International's questions regarding its purchasing of components or

products containing cobalt that has been processed by Huayou Cobalt.²⁹⁰ Instead, addressing the broader question about its due diligence policy, Apple wrote that it was:

"Currently evaluating dozens of different materials, including cobalt, in order to identify labor and environmental risks as well as opportunities for Apple to bring about effective, scalable and sustainable change."

Apple did not explain why it has not put in place due diligence measures for cobalt until now, particularly since human rights risks associated with its extraction in the DRC are well documented. For example, the US government has issued warnings relating to child labour linked to the extraction of cobalt in the DRC since 2009.²⁹²

HP Inc. (HP, formerly Hewlett-Packard Company) replied that it is "conducting an investigation" with its cobalt suppliers.²⁹³ It wrote that:

"As of now we have not found any linkage between our products and the DRC mine. If a linkage is found, we will take steps to address the risks you have raised."

HP did not explain what this investigation consists of, or whether it had traced the cobalt in its components or products to the smelter, as required by the OECD Guidance. HP refers to its Supply Chain Social and Environmental Responsibility Policy and states that this is consistent with the UNGPs. It also states that its supplier code of conduct prohibits child labour and that this is communicated to suppliers. However, specific details as to how abuses of the rights to children or other human rights abuses will be remediated (e.g. at the point of extraction) are not provided.

287. Letter from Daimler, 29 October 2015 (see Annex).

288. Daimler, *Sustainability Report 2014*, p. 65 (provided to Amnesty International by Daimler).

289. Email from Tianjin Lishen, 4 November 2015 (see Annex).

290. Huayou Cobalt, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; and *Annual Report, 2014*, p. 12.

291. Email from Apple, 5 December 2015 (see Annex).

292. US Department of Labor, *List of Goods Produced by Child Labor or Forced Labor*.

293. Email from HP, 17 December 2015.

Microsoft confirmed that Tianjin Lishen was a supplier, but only on a small scale.²⁹⁴

"We currently contract with this supplier [Tianjin Lishen] to provide a very limited number of batteries for a product development project. To our knowledge, Lishen batteries are not used in any product currently sold by Microsoft. Due to the small volumes used, Tianjin Lishen is not listed as a Microsoft Top 100 Hardware Supplier List... We took immediate action by asking Tianjin Lishen to remove this reference [on their website] to Microsoft as it is a misuse of the Microsoft name and implies incorrectly that we have a major contractual relationship. Lishen has complied with Microsoft's request."

Regarding its wider policy for tracing the source of minerals in the components and products that Microsoft purchases, the company conceded that it did not follow the OECD's guidance on this. Microsoft wrote that:

"we have not traced the cobalt used in Microsoft products through our supply chain to the smelter level due to the complexity and resources required."

Amnesty International does not consider this to be a convincing argument for not doing the required due diligence for DRC cobalt, particularly given the significant size and resources of the company, as well as its potential leverage over its suppliers.

Furthermore, Microsoft's representation that Tianjin Lishen is not one of Microsoft's Top 100 Hardware Suppliers is irrelevant. Current international standards relating to supply chain due diligence are not restricted to only carrying out supply chain due diligence on a company's major suppliers. The OECD

Guidance advises downstream companies that find it hard to identify upstream suppliers to work with other industry members in order to do so.²⁹⁵ Furthermore, as a global brand, with a net annual income of over US\$12 billion, Microsoft would likely have incredible leverage in terms of working with Lishen to improve its supply chain practices, specifically to seek to address serious human rights abuses in the chain.²⁹⁶

Lenovo, the parent company of Motorola, states that it is not a direct buyer of Tianjin Lishen and that Huayou Cobalt and CDM have not "otherwise been identified as cobalt processors in Lenovo's or Motorola's supply chain."²⁹⁷ However, the company advises that Tianjin Lishen supplies batteries to two of its "third party trademark licensees" that sell under the Motorola brand.

Lenovo wrote that it will:

"Work with Tianjin Lishen and our trademark licensees to investigate the concerns raised in your letter. If we verify that these concerns are valid, Lenovo will instruct our licensees to discontinue their use of Tianjin Lishen unless or until Tianjin Lishen can demonstrate compliance to Lenovo's requirements. Our agreements with our trademark licensees require them to abide by our supplier Code of Conduct which prohibits them from using suppliers that utilize child labour."

Lenovo does not state if it knew of any specific risks relating to child labour arising from Tianjin Lishen's supply chain prior to being contacted by Amnesty International. While being able to track Tianjin Lishen within its supply chain, Lenovo does not provide details as to how the company ensures that their trademark licensees follow the provisions of its code of conduct. Lenovo also does not state whether it has tracked the mineral back to the smelter, in accordance

294. Letter from Microsoft, 29 October 2015 (see Annex).

295. OECD Guidance, p. 42.

296. Microsoft, *Facts about Microsoft*, available at <http://news.microsoft.com/facts-about-microsoft/> (accessed 26 November 2015).

297. Letter from Lenovo, 10 November 2015 (see Annex).

with international standards (see Chapter 3). Lenovo states that it participates in industry efforts for due diligence on 3T and gold from the DRC, but not on other minerals.

Vodafone Group Plc (Vodafone) responded to Amnesty International and advised that it had checked its supplier systems and found that Tianjin Lishen was not a direct supplier, and that it does not use Chinese battery manufacturers.²⁹⁸

However it also stated that:

"Both the smelters and mines from which the metals such as cobalt are originally sourced are several steps away from Vodafone in the supply chain. For this reason, we are unaware as to whether or not cobalt in our products originates in Katanga in DRC or whether CDM and Huayou Cobalt process cobalt within our supply chains."

Vodafone's response shows that it is not attempting to trace their cobalt suppliers up to the point of their smelters, which falls short of what is required under the international standard. The company draws a distinction between its supply chain due diligence practices as conducted for 3T and gold and practices, if any, that would be carried out for cobalt. The company states that since cobalt is not explicitly required to be included in the annual report filed under US Dodd Frank 1502, it is not subject to the same standards.

This appears to be indicative of a broader perception expressed by companies referred to in this report that, if it is not required under law, then it does not need to be done. This is despite the OECD Guidance applying to all minerals sourced from conflict affected or high-risk areas and the OECD issuing clarification to this effect.

Volkswagen (VW) confirmed that it did not have an "active" relationship with BAK, but that it did with Tianjin Lishen.²⁹⁹ VW wrote that it contacted Tianjin

Lishen, which denied being supplied cobalt in the way that Amnesty International had described:

"The supply chain you mapped out in your letter was refused by our supplier. To our best knowledge, the Cobalt in our batteries does not originate from the DRC."

In its response, VW provided no indication that other steps were taken to verify Tianjin Lishen's denials. Nor did it refer to other efforts made to trace the cobalt supply chain up to smelters and go beyond Tianjin Lishen as required by international standards.

VW added that its "internal system for sustainable supply chain management" had not identified human rights abuses in cobalt supply chains. Company due diligence measures are referred to, but specific details are not provided as to the steps taken to assess, identify and address human rights risks arising in relation to cobalt. Therefore, it is difficult to ascertain how VW has reached this conclusion.

In its letter, VW also refers to its conflict minerals policy which primarily relates to the mining of 3T and gold and their risk in financing conflict. Cobalt is not explicitly referenced in the policy. However, the policy states that:

"Volkswagen along with other companies and trade associations welcomes the proposition of improving transparency in the raw materials sector, which is of great importance to the economic development of producing countries."

This reflects an acknowledgement by the corporate sector that better transparency in cobalt supply chains is necessary. That said, VW does not disclose any specific details relating to actual human rights risks identified as a result of conducting its own due diligence within their mineral supply chains.

ATL, BAK, BYD and Dell did not respond to Amnesty International.

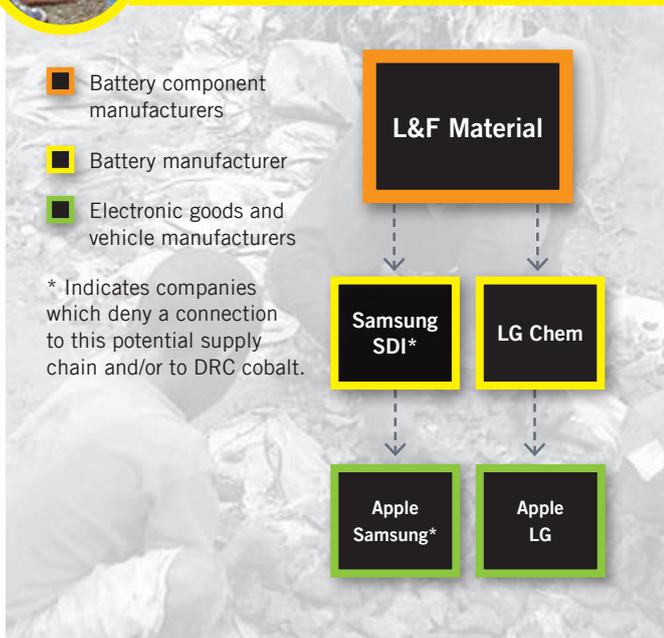
298. Letter from Vodafone, 29 October 2015 (See Annex). In a follow up email, Vodafone wrote to clarify that "it does not source batteries from China-based companies. Vodafone added that, after checking, it was not aware of their use in any Vodafone-branded devices." Email from Vodafone, 12 January 2016.

299. Letter from VW, 18 December 2015 (see annex).

L & F MATERIAL CO.'S POTENTIAL CUSTOMER NETWORK



POTENTIAL L&F COBALT SUPPLY CHAIN According to publicly available information



In a newspaper interview in October 2014, the company's CEO Lee Bong-won said it supplied battery materials to Samsung SDI, LG Chem Ltd. (LG Chem) and electric vehicle battery manufacturers based in Japan, North America and Europe.³⁰⁰

ANALYSIS OF COMPANY RESPONSES

LG Chem confirmed that Huayou Cobalt was a "second-tier" supplier and that "Huayou Cobalt which supplies cobalt oxide to one of our cathode materials suppliers, L&F Materials, purchases cobalt concentrate and crude cobalt hydroxide from CDM."³⁰¹

LG Chem advised Amnesty International that it asked L&F Materials to contact Huayou Cobalt to confirm Amnesty International findings and let LG Chem know of the steps it is taking to prevent "further problems." LG Chem added that:

"We are discussing whether there is a need for us to conduct our own inspection on the cobalt mining areas in Katanga, together with a 3rd party inspector. If the risk of human rights violations is confirmed to be very high and serious through the inspection, we will consider taking a wide range of effective actions to stop the violations, such as suspending or terminating business with those suppliers who procure cobalt from such mines."

While Amnesty International welcomes LG Chem's response that it will undertake an inspection, it is essential that LG Chem take active steps to address instances of child labour and other human rights abuses before terminating any contractual relationships.

As with other companies, LG details its policy towards the so-called "conflict minerals" of 3T and gold, but has no similar due diligence system in place for other minerals such as cobalt.

According to **Samsung SDI's** reply, the source of cathode materials that L&F Material supplies to it comes from a Japanese firm and not from Huayou Cobalt.³⁰² However, the company did not explain how it knows this information, nor if any efforts have been made to follow that supply chain further to the point of the smelter. L&F did not respond directly to Amnesty International's letter. As referred to earlier, Samsung SDI stated that due to the complexity of the supply chain, "it is impossible for us to determine whether the cobalt supplied to Samsung SDI comes from DRC Katanga's mines."

Samsung SDI also denied having any business relationship with Huayou Cobalt.

300. Korean Joongang Daily, *L&F Material Charges Ahead In Secondary Batteries*, 6 October 2014, available at <http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=2995702> (accessed 29 June 2015).

301. Letter from LG Chem, 13 November 2015 (see Annex).

302. Letter from Samsung SDI, 23 November 2015 (see Annex).

Apple named both Samsung SDI and LG Chem as among its leading suppliers in 2014.³⁰³ Its response to Amnesty International is found in the sub-section above (see: Ningbo Shanshan's customers).

TIANJIN BAMO'S POTENTIAL CUSTOMER NETWORK

According to a 2010 investor document, Tianjin Bamo's largest customers are BYD, Tianjin Lishen, and Coslight Group (Coslight).³⁰⁴ As stated above, BYD and Tianjin Lishen are also both supplied by Ningbo Shanshan.³⁰⁵ Coslight is a Chinese battery manufacturer and its website states that its main customers are mobile phone manufacturers such as Huawei Technologies Co., Ltd. (Huawei), ZTE, OKWAP and AHong.³⁰⁶

ANALYSIS OF COMPANY RESPONSES

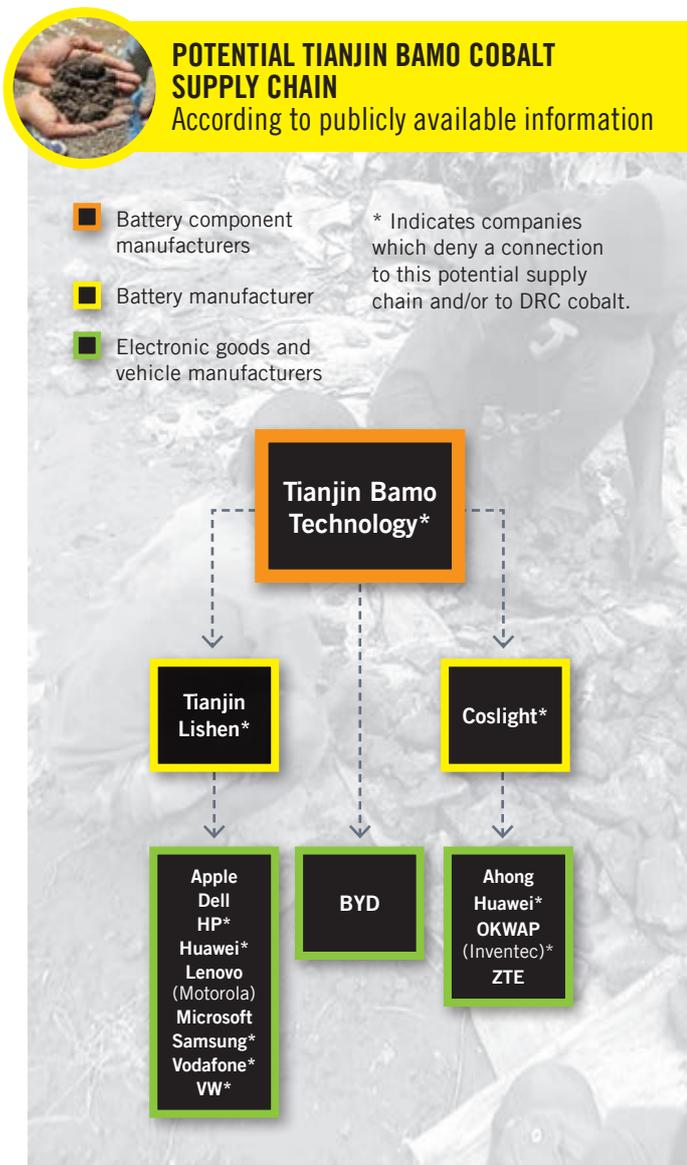
Huawei, the Chinese communications giant, confirmed that it was supplied by both Coslight and Tianjin Lishen.³⁰⁷ After receiving Amnesty International's letter, Huawei wrote that it contacted both companies about their cobalt purchases. Coslight and Tianjin Lishen both replied that their supplier, Tianjin Bamo advised that it had "no business dealings" with Huayou Cobalt.

Huawei provided no information about its steps to verify this information. Similarly, Coslight does not describe any independent steps taken by it to identify and verify its smelters, including whether Huayou is part of its cobalt supply chain. The claim by Tianjin Bamo contradicts statements by Huayou Cobalt, including its most recent Annual Report, which identified Tianjin Bamo as one of the largest buyers of its cobalt products in 2014, and detailed the size of its trade.³⁰⁸ Amnesty International concludes that without further substantiation, Tianjin Bamo's denial of having links to Huayou Cobalt lacks credibility.

Huawei did not describe having a supply chain due diligence policy that would meet international standards. It does not mention cobalt, and writes that it "has progressively imposed the prohibition on the purchase of tantalum, tin and tungsten among suppliers since 2002."

Inventec, owner of OKWAP, wrote that the company had not purchased from Coslight.

AHong and ZTE made no comment.



303. Apple Inc., *Supplier List 2015*.

304. Tianjin Bamo Technology Co., Ltd, *IPO Draft prospectus*, 2010, p. 105-6, <http://www.p5w.net/stock/ssgsyj/zqgg/201003P020100312823643990756.pdf> (accessed 29 June 2015).

305. Ningbo Shanshan Co. Ltd., *Annual Report 2014*, p. 19.

306. Coslight, *About Us*, available at <http://www.cncoslight.com/English/company.asp> (accessed 21 December 2015).

307. Letter from Huawei, 16 November 2015 (see Annex).

308. Huayou Cobalt Ltd, *Prospectus for First Phase of Short-term Financing Bills of 2014*, p. 68; *Annual Report 2014*, p. 12.

OVERALL CONCLUSIONS: DOWNSTREAM COMPANIES’ COBALT SUPPLY CHAIN DUE DILIGENCE PRACTICES

According to prevailing international standards, companies that use DRC cobalt in their products should be sourcing that mineral responsibly. Therefore they should be aware of, and address, the risks associated with its extraction and trading. Many red flags exist in relation to cobalt extraction in the DRC. More than half of the world’s cobalt is mined there in high-risk areas. The fact that children work in these artisanal mining areas – and the hazardous conditions under which people are extracting cobalt more generally – have been reported for years.³⁰⁹

“Downstream” companies should have exercised, and on an ongoing basis continue to exercise, due diligence on their cobalt supply chain, including by tracing their suppliers up to their smelters. They should also address the due diligence practices of their smelter (in this instance Huayou Cobalt) in responding to identified risks. How a downstream company responds depends on its position in the supply chain. Companies that have the most leverage over Huayou Cobalt – such as large, influential companies or battery component manufacturers that sit closer in the chain to Huayou – have a greater responsibility to exercise their leverage for these purposes.³¹⁰ These activities can also be undertaken with other companies within the industry or through industry schemes – although companies remain individually responsible for their own due diligence. In their letters to Amnesty International, most companies referred to their own internal policies on responsible sourcing. They said that they take human rights seriously and many mentioned that they require suppliers to respect human rights and not employ children. However, they did not provide

details of specific investigations and checks that they have undertaken to identify and address child labour in their cobalt supply chains. Many said they were members of an industry initiative, the Electronics Industry Citizenship Coalition (EICC), which has established a code of conduct.³¹¹ However, none of the companies approached by Amnesty International said that they had been in touch with Huayou Cobalt prior to receiving our letter. None said that they had sought to exercise due diligence on their cobalt supply chain or trace where the cobalt in their products had come from prior to receiving our letter.

Many of these companies stated that they have a zero tolerance policy when it comes to child labour in their supply chains. Some of these companies refer to contractual requirements that they impose on direct suppliers to ensure that they adhere to these types of prohibitions. Others refer to specific provisions that the company has developed in relation to the child’s rehabilitation into education and/or financial support should this be found in factories. However, they did not provide any information on whether these policies are being implemented in relation to the DRC cobalt supply chain. It is unclear what remediation measures the companies will take if children are found to be working in the mining areas themselves rather than in a factory.³¹² This represents a serious gap in the implementation of these policies, particularly considering the likelihood that the companies may already have sourced cobalt which was mined in conditions which breach children and adult miners’ human rights.

Only Apple and Microsoft said that they had taken any sort of proactive steps to address human rights issues in the artisanal mines in southern DRC. In Apple’s case, this is at a very early stage, with the company “currently evaluating dozens of different materials, including cobalt, in order to identify labour and environmental risks as well as opportunities for Apple to bring about effective, scalable and

309. E.g. Guerin, Orla, *DR Congo’s child miner shame*, BBC News, 12 June 2006, <http://news.bbc.co.uk/1/hi/5071172.stm> (accessed 9 June 2015)

310. OECD Guidance, p. 44.

311. Electronic Industry Citizenship Coalition, Code of Conduct, <http://www.eiccoalition.org/standards/code-of-conduct/>

312. See Table of Company Responses. It should be noted that hazardous working conditions are not as clearly addressed in the responses received by companies.

sustainable change." Microsoft said it was already supporting an organisation that was tackling human rights abuses, including child labour, in artisanal mines in southern DRC.

As for tracing the mineral through its supply chain to the smelter, Microsoft stated that in practice, "tracing metals such as cobalt up through multiple layers of our supply chain is extremely complex." Microsoft wrote that creating such a tracing mechanism would require "a large degree of vertical and cross-industry collaboration." Yet, no further details were provided on actual attempts made by the company to trace this chain in practice. Compared to the supply chain due diligence that many companies have started to develop in relation to 3T and gold, Amnesty International's research has shown that cobalt is no more difficult. In fact, research carried out in this report suggests that the trade in cobalt is more concentrated since so much of it is sourced from the DRC.

Most of the consumer facing companies we identified in Huayou Cobalt's supply chain have a global presence. For them, supply chain due diligence requirements for all minerals – as laid out by the OECD Guidance – are not new. Additionally, many of them are US listed companies subject to section 1502 of the Dodd-Frank Act reporting requirements, which requires them to check whether certain minerals in their products (tin, tantalum, tungsten (3T) and gold) are contributing to conflict or human rights abuses in the DRC or surrounding countries.³¹³ As a result, they already have specific supply chain due diligence policies on 3T and gold. Yet despite the OECD Guidance applying to all mineral supply chains, it is clear that these companies are currently failing to operationalise the OECD's five step due diligence process beyond whatever they have put in place for 3T and gold.

Vodafone, for example, wrote that:

"it is important to note that cobalt is not one of the minerals which is included in the

Conflict Minerals report [the report that certain companies are required to file under section 1502 of the Dodd-Frank Act] and therefore [not] subject to the same level of due diligence as the other minerals noted above."

Samsung SDI wrote that:

"the company investigated the country of origin of cobalt which is not on the current list of conflict minerals. However, in reality, it is very hard to trace the source of the mineral due to suppliers' nondisclosure of information and the complexity of supply chains."

Apple states that with regards to conflict minerals (defined by it as 3T), it

"...goes beyond what is legally required to drive further change in the DRC and neighbouring countries. We provide significant funding and strategic guidance to several programs that are increasing the number of registered miners operating in, and selling their materials through, conflict-free channels, providing educational and health care support to mining communities, developing best practices for small scale miners to improve their productivity and health & safety, and improving methods for tracking and trading materials from the mine to the smelter."

However, it detailed no equivalent programmes relating to cobalt.

Despite the fact that the DRC is by far the world's largest source of cobalt, and that the poor conditions of its artisanal mines, and the presence of children working in them, is well known, the responses received demonstrate that very few downstream companies that are purchasing cobalt, or products containing cobalt, are taking steps to meet even the most basic due diligence requirements.

313. US listed companies include Apple, Dell, HP and Microsoft. Section 1502, Dodd-Frank Wall Street Reform and Consumer Protection Act.

ABSENT ROLE OF HOME STATES IN REQUIRING COMPANIES TO BE TRANSPARENT ABOUT THEIR COBALT SUPPLY CHAINS

The research in this report exposes a clear gap in relation to the role of home states, such as China, as well as many others, in requiring transparency around cobalt supply chain practices. Currently, no country legally requires companies to publicly report on their cobalt supply chains. The result is that companies can profit from on-going human rights abuses in the cobalt supply chain, such as child labour, without detection.

The research also exposes conflicting information regarding the traceability of actors in the cobalt supply chain. On the one hand, public statistics indicate that most cobalt used in the world comes from the DRC. Yet, on the other hand, most of the companies contacted by Amnesty International as identified in this report, deny sourcing cobalt from the DRC and/or from Huayou Cobalt, a company which has a considerable presence in the industry as well as in that country. The companies have made these denials despite publicly available information identifying them as part of the supply chain. However, without any legal requirement for these companies to disclose the basis on which they are coming to these conclusions (i.e. no links to child labour, DRC cobalt or Huayou Cobalt), Amnesty International cannot independently evaluate or challenge their assertions. As a result of this lack of transparency, the people at the beginning of the supply chain, who suffer human rights abuses, are no better off in terms of having their situation improved and right to remedy realised. Yet, companies are still able to profit.

Regulation is required to ensure transparency in relation to the points of extraction, the conditions of extraction and trading, and the chain of custody (actors involved) for cobalt. This will help to achieve the greater objective of ensuring that those responsible for the human rights abuses (including the companies who have on-going abuses such as child labour in their supply chains) become part of the solution.

The company responses clearly show that law is required for them to carry out due diligence on their supply chains (on an on-going basis) and disclose these practices in accordance with international standards. As outlined above, a number of the companies contacted referred to specific supply chain due diligence policies that they have in place for 3T and gold, yet they draw a line when it comes to cobalt. One of the companies openly admits to this, underscoring the importance of regulation in getting companies to carry out and disclose these practices for other minerals extracted from conflict affected or high-risk areas.

Under international human rights law, states have a duty to protect against human rights abuses by all actors, including businesses. Amongst other things, this requires governments to enact and enforce laws that require businesses to respect human rights, create a regulatory environment that facilitates business respect for human rights, and provide guidance to companies on their responsibilities.³¹⁴ An effective way of achieving these objectives would be for host and home states to adopt regulations that require corporate due diligence and disclosure in relation to cobalt and other minerals extracted or sourced from conflict-affected or high-risk areas.

314. UNGPs, State Duty to Protect Human Rights (Principles 1, 2 and 3).

CONCLUSION AND RECOMMENDATIONS

The government of the Democratic Republic of the Congo (DRC) is failing to meet its obligations to protect people from abuses of their rights to and at work and health through its failure to put in place and enforce adequate safeguards for artisanal miners working in unauthorized areas. The government should create more *Zones d'exploitation artisanale* (Artisanal Mining Zones or ZEAs) and, wherever this is possible taking into account safety and policy considerations, regularize unauthorized mining areas. Where this is not possible, the government should support artisanal miners in finding other authorized sites and help create alternative employment options. It should extend and enforce new labour and safety protections, and provide support in realising these protections, to all artisanal miners.

The government has failed to put in place an adequate system to monitor and enforce the labour standards that do exist, including on the worst forms of child labour. There continues to be a serious gap between the age of compulsory education and the minimum age of employment increasing children's vulnerability to ending up in the worst forms of child labour. The government has yet to remove financial and other barriers that children face in accessing primary education and to ensure that all children are able to access free and compulsory primary education. It is essential that the government adopt and implement the National Action Plan to Eliminate the Worst Forms of Child Labour, as a matter of urgency.

There is also a clear gap when it comes to the regulations by home states of companies operating in the DRC and/or companies whose supply chains include cobalt mined from artisanal mines in the DRC where adults and children work in hazardous conditions. As the home state of Huayou Cobalt, the

Chinese government should immediately engage with the company on the issues raised in this report. They should ensure that the company addresses the serious issues within their cobalt supply chain as well as remediate the harm suffered by people whose human rights have been abused.

The US, South Korea, and many other states where the companies identified in this report are headquartered, are failing to play a meaningful role. At a minimum, they should require greater transparency around cobalt supply chain practices. Currently, no country legally requires companies to publicly report on their cobalt supply chains. Regulation is required to ensure transparency in relation to the points of extraction, the conditions of extraction and trading, and the chain of custody (actors involved) for cobalt. This will help to achieve the greater objective of ensuring that those responsible for the human rights abuses (including companies that have on-going abuses such as child labour in their supply chains) become part of the solution.

Under international human rights law, all states have a duty to protect against human rights abuses by all actors, including businesses throughout their global operations. Among other things, this requires all governments to enact and enforce laws requiring corporate due diligence and public disclosure in relation to cobalt and other minerals.

Companies should undertake and publicly disclose their due diligence practices. Companies have a responsibility to mitigate and take corrective measures for the victims if they have failed to respect human rights at any point during their operations. This requires that a company not simply discontinue a trading relationship with a supplier or embargo DRC cobalt once human rights risks have been identified in the supply chain. If human rights abuses have occurred at any point in the supply chain, the company must, in cooperation with other relevant actors, such as its suppliers and national authorities, take action to remediate the harm suffered by the people affected.

RECOMMENDATIONS TO THE GOVERNMENT OF THE DRC

FOR THE MINISTRY OF MINES TO:

- Create new authorized artisanal zones (Zones d'exploitation artisanale or ZEA's) in accessible and productive mine sites. Through SAESSCAM (Service d'Assistance et d'Encadrement du Small Scale Mining), support the formalisation of mining activities through the creation of miners' co-operatives.
- Regularize unauthorized mining areas, where this is possible taking into account safety and policy considerations. Where this is not possible, support artisanal miners in moving to other authorized sites and help create alternative employment options.
- Provide all artisanal miners, including those in unauthorized mining areas, with safety equipment, such as boots, protective headgear and appropriate face masks.
- As a matter of priority, provide technical support and health and safety training, through SAESSCAM, to artisanal miners in unauthorized mining areas.
- Ensure that SAESSCAM has the mandate and sufficient resources to provide technical and other support to all artisanal miners, including those working in unauthorized mining areas.

FOR THE MINISTRY OF LABOUR TO:

- Remove children from artisanal mining and in cooperation with the Ministry of Gender, Women and Children and Ministry of Education, put in place measures to address children's health, physical, educational, economic and psychological needs. Ensure that reintegration activities are aligned with income-generating opportunities available within the community.
- Ensure that the labour inspectorate has sufficient resources and training to monitor and enforce labour laws in artisanal mining areas and to address the worst forms of child labour.

- Systematically collect, monitor and make available information on child labour complaints as well as the types and numbers of inspections conducted, citations issued, prosecutions undertaken, and penalties applied in relation to child labour violations.
- In cooperation with the Ministry of Health, put in place health monitoring and treatment services for artisanal miners to assess and treat occupational diseases.

FOR THE MINISTRY OF EDUCATION TO:

- Remove financial and other barriers to accessing primary education and provide for free and compulsory education, as decreed by President Joseph Kabila in 2010.
- Reintegrate into the school system children whose education has been disrupted because of their involvement in artisanal mining.

FOR THE MINISTRY OF JUSTICE TO:

- Investigate reports that officials are extorting illegal payments from artisanal miners. Those suspected of having perpetrated offences must be prosecuted according to international fair trial standards, and preventative measures must be put in place to avoid any recurrences.

FOR PARLIAMENT AND THE PRIME MINISTER TO:

- Revise the age for compulsory education to 16 years to be equivalent to the minimum age for employment.
- Amend/revise the Mining Code and Regulations to include adequate labour and safety standards, which are applicable to all artisanal miners.
- Revise the Mining Code to include requirements on all buying houses to conduct human rights due diligence on cobalt and other minerals that they buy from artisanal miners and to refer artisanal miners to SAESSCAM for support where

they encounter poor working conditions.

- Implement in full and adequately resource the National Action Plan to Combat the Worst Forms of Child Labour.
- Ratify ILO Convention No. 155 on Occupational Safety and Health, 1981, ILO Convention No. 176 on Safety and Health in Mines, 1995 and the African Charter on the Rights and Welfare of the Child.
- Seek international assistance and cooperation, including technical cooperation, as necessary, to implement these recommendations.

RECOMMENDATIONS TO THE GOVERNMENT OF THE PEOPLE’S REPUBLIC OF CHINA

FOR THE MINISTRY OF COMMERCE OF THE PEOPLE’S REPUBLIC OF CHINA (MOFCOM) TO:

- Initiate a review of Huayou Cobalt’s supply chain due diligence processes with a view to assessing their adequacy for identifying, preventing, and mitigating human rights risks.
- With respect to the Measures for the Administration of Overseas Investment:
 - Amend Article 20 to add “respect human rights throughout all business operations” to the list of company obligations.
 - Enact policies with reference to Article 24 requiring companies that extract, process, trade, transport, or use mineral products from conflict-affected or high-risk areas to disclose the steps being taken to manage and mitigate human rights risks in their business operations.

FOR THE STANDING COMMITTEE OF THE NATIONAL PEOPLE’S CONGRESS TO:

- Amend Article 5, Paragraph 1 of the Company Law of the People’s Republic of China to add

“respect human rights throughout all business operations” in relation to the statutory obligations for Chinese companies.

FOR THE CHINESE CHAMBER OF COMMERCE OF METALS MINERALS & CHEMICALS IMPORTERS & EXPORTERS (CCCCM) TO:

- Require Chinese companies, including Huayou Cobalt, to put in place processes for conducting supply chain due diligence following the five-step process set out in the OECD and CCCC Due Diligence Guidelines and to report publicly on the steps taken by each company to manage and mitigate human rights risks in its business operations.
- Work with companies, audit experts, and NGOs to formulate audit protocols and standards for cobalt and other mineral resources beyond tin, tantalum, tungsten and gold.

RECOMMENDATIONS TO OTHER HOME STATES (COUNTRIES WHERE MULTINATIONAL COMPANIES THAT TRADE IN, OR PURCHASE COBALT, ARE HEADQUARTERED)

- Legally require companies to conduct human rights due diligence on their mineral supply chains, and report publicly on their due diligence policies and practices in accordance with international standards.
- Provide international cooperation and assistance to the government of the DRC to support its efforts to extend labour protections to all artisanal miners and remove children from the worst forms of child labour.

RECOMMENDATIONS TO THE INTERNATIONAL CONFERENCE ON THE GREAT LAKES REGION (ICGLR)

- Call on member states, including the DRC, to legally require companies to add cobalt to the list of minerals requiring mandatory human rights due diligence in line with the OECD Guidance.
- Call on member states to legally require companies to conduct human rights due diligence on their mineral supply chains, and report publicly on their due diligence policies and practices, in accordance with international standards.

RECOMMENDATIONS TO THE OECD

- Call on states to legally require companies to conduct human rights due diligence on their mineral supply chains, and report publicly on their due diligence policies and practices, in accordance with international standards.
- Ask states to report on measures taken to ensure the implementation of the OECD Guidance, including public disclosure requirements, and compliance by companies.

RECOMMENDATIONS TO COMPANIES:

- Conduct supply chain due diligence for cobalt and other minerals and publicly disclose their due diligence policies and practices in accordance with international standards, including how human rights risks are identified, prevented and addressed in global operations.
- Take remedial action, in cooperation with other relevant actors, if human rights abuses have occurred at any point in a supply chain relationship. Revise due diligence and other policies to clarify what corrective measures will be taken by the company if human rights abuses exist at the point of extraction, in the mining areas themselves and at other points in the supply chain (including but not limited to the factories of suppliers).

FOR HUAYOU COBALT TO:

- Take action, in cooperation with national authorities, international agencies and civil society, to remediate the harms suffered by adult and child artisanal miners that the company has been sourcing from. This includes developing and implementing a plan to remove children from the worst forms of child labour, support children's reintegration into the school system and address children's health, physical, educational, economic and psychological needs.
- Address human rights risks throughout its business operations, with particular focus on the elimination of human rights abuses in the cobalt supply chain of its wholly owned subsidiary, Congo Dongfang International Mining SARL.
- Conduct supply chain due diligence following the five-step process set out in the OECD and CCCMC Due Diligence Guidelines. This includes identifying where minerals are extracted, chain of custody, and the conditions of trading.
- Publicly disclose the steps taken to identify, assess and mitigate human rights risks and abuses in its business operations.

TO DOWNSTREAM COMPANIES IN HUAYOU'S COBALT SUPPLY CHAIN:

- Conduct supply chain due diligence for cobalt and other minerals and publicly disclose their due diligence policies and practices in accordance with international standards, including the identity of smelters in their supply chain and their actual or potential associated human rights risks.
- Take action, in cooperation with other relevant actors, such as its smelters and national authorities, to remediate the harm suffered by people whose human rights have been abused at any point in the supply chain. This includes ensuring that a plan is put in place and implemented to remove children from the worst forms of child labour, support children's reintegration into the school system and address children's health, physical, educational, economic and psychological needs.

ANNEX Letter from Huayou Cobalt

The Reply to Amnesty International Concerning Conditions for Artisanal Miners in Zhejiang Huayou Cobalt Supply Chain

Dear James Lynch and Amnesty International's officials,

Zhejiang Huayou Cobalt Co, Ltd (hereinafter referred to as "Our Company") received the letter entitled Conditions for Artisanal Miners in Zhejiang Huayou Cobalt Supply Chain (hereinafter referred to as "the Letter") from the Amnesty International (hereinafter referred to as "Your Organisation") on 9 July 2015.

The Letter specifically mentioned that Congo Dongfang International Mining Ltd (hereinafter referred to as "CDM"), our subsidiary and cobalt ore supplier, has purchased cobalt produced at the artisanal mines in Katanga Province in the Democratic Republic of Congo (hereinafter referred to as "DRC"), and the cobalt supplied by its cobalt traders has been mined by children in unsafe working conditions. Your Organisation therefore believes that Zhejiang Huayou has not met its responsibility to respect the human rights, as stipulated in the Chinese and international guidelines.

Additionally, Your Organisation requests a response from us to the following questions:

1. What supply chain due diligence policies and processes do we have in place to ensure that CDM's sourcing of cobalt from the DRC does not involve human rights violations, including the worst forms of child labour?
2. What measures does Zhejiang Huayou take if we became aware of human rights abuses taking place in connection with their suppliers?
3. What steps has Zhejiang Huayou taken to investigate the claims made in the 2008 Bloomberg report regarding CDM's purchasing of cobalt mined by children in artisanal mines in the DRC, and what was the outcome of this investigation? Were any changes made to CDM or Zhejiang Huayou policies and processes?

CDM are mining rights holders and traders who legally hold trader cards. (Please see attachments 2, 3 and 4 for copies of trader cards of some of CDM's suppliers). CDM has reasonably presumed that the behaviours of suppliers comply with relevant regulations of the DRC and taken the corresponding social responsibilities.

5. To ensure the mining conditions of suppliers, CDM's management visits the suppliers from time to time to examine the employment conditions of the suppliers. CDM's management recently visited Luputo site in 2014, and Tulwuzembe site in June 2014. They didn't find any child labour working at any of the sites during these visits. We would like to draw your consideration that the Labour Department of the DRC should be the regulatory body to oversee the legitimacy of employment conditions of the suppliers, and perform regulatory functions. As a business entity, Our Company is not able to assign staff to the suppliers sites to supervise in a long-term manner. We can only visit the suppliers from time to time to meet our social responsibilities. Our Company has not found any cases of child labour employment during these visits.
6. Your Organisation mentions in page 2 of the Letter that CDM has put up a signboard showing the words "good price" outside its depot in Musompo to buy cobalt directly from artisanal miners. But in fact neither CDM nor any of our subsidiaries has depots in Musompo, nor has any of them put up any "good price" signboard as suggested in P.2 and P.9 of your letter. We would like you to verify this information.

Furthermore, we wish to draw your attention to the fraudulent misuse of the names of Our Company and CDM by some local residents of the DRC to purchase mineral products in various regions, as we have learned. This has greatly damaged the reputation and interests of Our Company and CDM.

7. CDM and COMMUS, our subsidiary in the DRC, have actively taken part in public interest activities concerning human rights and social security in the DRC. CDM employees' remuneration include social security and family payments. We also regularly vaccinate employees to ensure their physical health. Attachment 6 is part of the report on the social public interest activities CDM and COMMUS have engaged since 2007. You can see that Our Company has actively participated in public interest

4. What kind of information does Zhejiang Huayou publicly report on the risks of labour and human rights abuses linked to its operations and on preventative or other measures that it is taking in response?

5. What is the volume and value of the cobalt that CDM buys from artisanal miners in the DRC each year?

Our Company's leadership has taken your letter very seriously. Upon sending a reply to you on 23 July 2015, we have conducted comprehensive reviews of the internal policies and suppliers of Our Company and CDM, as well as the information mentioned in the Letter. Here is the response to Your Organisation:

1. Our Company has not been aware that any of our legitimate suppliers has hired child labour in their mining sites or operated in unsafe working conditions.
2. Our Company has taken positive actions since we became aware of the 2008 Bloomberg report regarding CDM's purchase of cobalt mined by children in artisanal mines in the DRC. For example, we have gradually closed down the procurement sites and all of them have been closed by now. Currently the ores for CDM are mainly from mining rights holders and traders.
3. Our Company has developed a Code of Conduct for Suppliers. The Code will apply to Our Company and CDM, and imposes restrictions on the our suppliers and those of CDM for child labour employment and on working conditions. The Code will be quoted and included as part of the procurement and sales contracts between Our Company, CDM and the suppliers. It states clearly that: "If the supplier breaches the Code and fails to implement rectifying actions before the agreed deadline, Our Company will be entitled to suspend purchase from the supplier unilaterally until the supplier implements rectifying actions, or terminate cooperation with the supplier unilaterally". Our Company will meet its social responsibilities by adopting this Code of Conduct. Please see attachment 1 for the Code of Conduct for Suppliers.
4. CDM has rigorously selected its ore suppliers to ensure the procurement of raw materials through legitimate channels. Currently the suppliers of

activities, and we have put more than US\$5 million into the communities, local social aid, donations and community public interest activities. We will put in more funds for these purposes. Our Company has always actively met its social responsibilities and carried out more than 80 public interest activities so far.

8. Our Company and CDM welcome the scrutiny of Your Organisation, and are more than willing to work closely with you and improve the situation of child labour and working conditions in the DRC, in order to actively advance human rights protection in the DRC.

Attachment 1 : Code of Conduct for Suppliers of Zhejiang Huayou Cobalt Co, Ltd

Attachment 2: IBC Depot (LI Xuzhang) = Carte d negociant

Attachment 3: CdN Likasi

Attachment 4: Elias depot (JIANG Zhi) = Carte d negociant

Attachment 5: The Accounts of Public Interest Activity Management

CHEN Xuehua
Zhejiang Huayou Cobalt Co., Ltd.
19 August 2015

Chinese letter from Huayou Cobalt, page 1



致国际特赦组织《关于浙江华友钴业股份有限公司供应链中手工采矿者的状况》的回函

尊敬的 JAMES LYNCH,

尊敬的国际特赦组织各位官员：

浙江华友钴业股份有限公司（以下简称“本公司”）于 2015 年 7 月 9 日收到国际特赦组织（以下简称“贵组织”）发来的《关于浙江华友钴业股份有限公司供应链中手工采矿者的状况》函件（以下简称“函件”）。

该函件着重提到了本公司下属子公司及钴矿供应商刚果东方国际矿业有限公司（以下简称“CDM 公司”）在刚果民主共和国（以下简称“刚果（金）”）加丹加省购买手工采矿场产出的钴矿，并且其钴矿贸易商供应的钴矿是儿童在不安全工作条件下开采的。因此，贵组织认为，华友钴业违反了中国和国际上指导性文件中规定的尊重人权的责任。

此外，贵组织希望本公司就以下问题进行答复：

1. 本公司在供应链方面订立了什么尽责政策和程序，以确保 CDM 公司在刚果（金）的钴业采购不涉及侵犯人权行为，包括最恶劣形式的童工劳动？
2. 如果华友钴业知悉其供应商和侵犯人权行为有关，采取了什么措施处理？
3. 彭博社 2008 年报道了 CDM 公司收购儿童在刚果（金）手工矿场中开采矿物，华友钴业对此报道采取了什么步骤调查？调查结果如何？CDM 公司和华友钴业的政策和程序是否有任何改变？
4. 华友钴业就与业务相关的侵犯劳工权利和侵犯人权行为风险，及其采取的预防或其他应对措施，公开报告了何种信息？
5. CDM 公司每年从刚果（金）的手工采矿者采购的钴矿数量和价值是多少？

贵组织的函件引起了本公司领导层的高度重视，本公司自于 2015 年 7 月 23 日向贵组织做出回函后，对本公司及 CDM 公司内部政策、供应商及函件中提到的信息做了全面的审查，并向贵组织做出以下答复：

Chinese letter from Huayou Cobalt, page 2



1. 本公司并不知晓本公司任何合法供应商在其矿区中雇佣童工，或采取不安全的工作条件。
2. 本公司在知晓彭博社 2008 年对 CDM 公司收购儿童在刚果（金）手工矿场中开采矿物的报道后，积极采取了行动。例如，本公司逐步关闭收购点，到目前为止，本公司已经关闭了所有的收购点。目前，CDM 公司的矿原料主要来源于采矿权持有者和贸易商。
3. 本公司已经制定了供应商行为准则。该供应商行为守则将适用于本公司及 CDM 公司，对本公司和 CDM 公司供应商雇佣童工行为以及工作条件做出限制性规定，此行为准则将在本公司及 CDM 公司与供应商签订的购销合同中引用，并成为购销合同的一部分。该行为准则中明确规定：“如果供应商违反本守则的规定，并且未在商定的期限内执行整改行动，本公司有权利单方面保留暂停从该供应商处采购，直至该供应商执行纠正措施；或者有权利单方面终止与该供应商的合作关系。”，本公司将通过实施该行为准则履行本公司的社会责任。供应商行为守则请参见本回函附件 1。
4. CDM 公司对其矿产供应商经过严格的筛选，保证通过合法途径采购原料。CDM 公司的供应商目前为采矿权持有者以及合法持有的贸易商卡的贸易商处进行采购。（CDM 公司部分供应商的贸易商卡复印件，请参见本回函附件 2, 3 和 4）。CDM 公司合理推断供应商的行为符合刚果（金）政府的相关规定，承担了相应的社会责任。
5. 为保证供应商的采矿条件，CDM 公司管理层不定期走访供应商，以审查供应商的雇佣条件。CDM 公司管理层最近于 2014 年走访了 Luputo 矿区，并于 2014 年 6 月走访 Tulwuzenbe 矿区，CDM 公司管理人员在走访期间并未发现任何矿区内有童工工作。提请贵组织理解的是，刚果（金）劳工部门应该为供应商的雇佣条件是否合法的监管部门，由劳工主管部门履行监管职能。本公司作为商业主体，无法长期派员在供应商处驻场监管，本公司只能通过不定期的走访供应商，尽到本公司的社会责任。在本公司不定期的走访过程中，本公司并未发现供应商有雇佣童工的情形。
6. 贵组织在函件中第 2 页提到，CDM 公司在姆松坡的仓库外设有采购钴矿和铜矿的“好价格”标识牌，以直接从手工采矿者手中购买钴矿。然而，事实上 CDM 公司或本公司下属的任何子公司在姆松坡均不设有任何仓库，也从未安装贵组织函件第 2 页和第 9 页所述的“好价格”标识牌。烦请贵组织核实该信息。

此外，需提请贵组织注意的是，本公司了解到刚果（金）当地居民冒用本公司或 CDM 公司的名义在各地收取矿产品，此行为也极大损害本公司及 CDM 公

Chinese letter from Huayou Cobalt, page 3



司的声誉及利益。

7. CDM 公司及本公司下属刚果（金）COMMUS 公司积极参与刚果（金）人权及社会保障公益事业。CDM 公司对其员工的劳动报酬中均包含相应社会保障金、家庭金等，并且对员工定期注射疫苗，以保证员工的身体健康。本回函附件 6 为 CDM 公司和 COMMUS 公司自 2007 年以来社会公益活动的部分报告，通过该附件，贵组织可以发现，本公司积极参加刚果（金）社会公益活动，本公司目前已经投入 500 多万美元用于社区以及当地社会援助、捐赠以及参与社区公益事业，本公司为此将进一步的投入资金。本公司一直积极履行社会责任，到目前已经从事了 80 多起的社会公益活动。
8. 本公司及 CDM 公司欢迎贵组织的监督，并且非常愿意与贵组织紧密合作，加强刚果（金）雇佣童工及工作条件的改善工作，以积极推动刚果金（金）人权保护运动。

附件 1：浙江华友钴业股份有限公司供应商行为准则

附件 2：IBC Depot(李绪章)=Carte d negociant

附件 3：CdN Likasi

附件 4：Elias depot(蒋志)=Carte d negociant

附件 5：公益事业管理台账

陈晋章
浙江华友钴业股份有限公司
2015年8月19日

SUMMARY OF RESPONSES RECEIVED FROM DOWNSTREAM COMPANIES

(Full copies accessible at amnesty.org)

TABLE 1: Companies potentially buying from Ningbo Shanshan as part of Huayou Cobalt's supply chain

Company	
<p>Apple Inc. 1 Infinite Loop Cupertino, CA 95014 United States of America</p> <p>Annual turnover: US\$233,715,000,000¹ for fiscal year ended 26 September 2015</p> <p>Annual net profit: US\$53,394,000,000² for fiscal year ended 26 September 2015</p>	<p>Does cobalt in the company's products originate in the DRC? Currently under evaluation.</p> <p>Do CDM or Huayou Cobalt process cobalt within the company's supply chain? Currently under evaluation.</p> <p>Details of the company's human rights policies and due diligence measures: Child labour: "Underage labor is never tolerated in our supply chain and we are proud to have led the industry in pioneering new safeguards. We not only have strict standards, rigorous audits and industry-leading preventative measures, but we also actively look for any violations. Any supplier found hiring underage workers must 1) fund the worker's safe return home, 2) fully finance the worker's education at a school chosen by the worker and his or her family, 3) continue to pay the worker's wages, and 4) offer the worker a job when he or she reaches the legal age."</p> <p>"We have been reporting on our supply chain for 10 years because we believe transparency and the feedback that comes with it makes us better. Of more than 1.6 million workers covered in 633 audits in 2014, our auditors uncovered 16 cases of underage labor and all were successfully addressed. We take any concerns seriously and investigate every allegation."</p> <p>Conflict Minerals (specific to tin, tungsten, tantalum and gold): "In the last 5 years, Apple worked with peers and stakeholders to implement and improve an industry wide standard, drove compliance with the Conflict Free Sourcing Program or equivalent third party audit programs, and expanded traceability to the mine site. As of November 2015, over 95% of our reported smelters are compliant or participating in a third party audit verifying their conflict-free sourcing practices. And we will not stop until we reach our goal of 100%."</p> <p>"Apple goes beyond what is legally required to drive further change in the DRC and neighboring countries. We provide significant funding and strategic guidance to several programs that are increasing the number of registered miners operating in, and selling their materials through, conflict-free channels, providing educational and health care support to mining communities, developing best practices for small scale miners to improve their productivity and health & safety, and improving methods for tracking and trading materials from the mine to the smelter."</p> <p>Specific to cobalt: "We are currently evaluating dozens of different materials, including cobalt, in order to identify labor and environmental risks as well as opportunities for Apple to bring about effective, scalable and sustainable change. As we gain a better understanding of the challenges associated with cobalt we believe our work in the African Great Lakes region and Indonesia will serve as important guides for creating lasting solutions."</p>

Daimler AG

70546 Stuttgart
Germany

Annual turnover:

129,872,000,000 €³ for fiscal
year ended 31 December 2014

(US\$141,345,242,000⁴)

Annual net profit:

7,290,000,000 €⁵ for fiscal
year ended 31 December 2014

(US\$7,934,018,000⁶)

Does cobalt in the company's products originate in the DRC?

Company's procurement practices do not: "engage in any traceable mineral or commodity purchasing activities in the Democratic Republic of Congo. Concerning the particular case at hand we can confirm that we neither source from the DRC or the mentioned companies directly."

"Due to the high complexity of automotive supply chains, we are, however, not able to definitely confirm whether or not cobalt in our products originates from this region or from the mentioned companies at any stage within our supply chains."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

After a review via its internal procurement and human rights processes, the company states that "neither Ningbo Shanshan Co. Ltd., nor any of the other companies which were named by you are in fact Daimler suppliers."

Details of the company's human rights policies and due diligence measures:

"Daimler is committed to adhering to international human rights standards in line with the UN Guiding Principles on Business and Human Rights...We see this commitment as extending to, and including, the ILO core-norms and also, specifically, ILO Norm 182 on the worst forms of child labour."

"Our 'Supplier Sustainability Standards' impose strict obligations with respect to working conditions, social standards, environmental standards and business ethics that go beyond the requirements of the law. These obligations are an integral component of the contractual agreements, which Daimler concludes with its suppliers. By signing the contract, the supplier is expected to implement and verify that these requirements are adhered to by its own suppliers."

"Within these standards we explicitly state that 'Child labor is not allowed at any phase of production or processing. As a minimum, suppliers are requested to comply with the ILO's conventions on minimum employment age and the ban on child labor. Children must not be inhibited in their development. Their health and safety must not be impaired'."

"Our suppliers undertake to comply with these standards, communicate them to their employees, and apply them to their upstream value chains. We support them for this with regular information and training measures. We regularly assess our suppliers' compliance with sustainability standards on the basis of a risk analysis conducted according to country and commodity group risks...In the event of suspicious cases or specific violations, we follow up with an established escalation process...up to and including the termination of the business relationship."

"Our company reports annually about its sustainability management in supplier relationships within the Daimler Sustainability Report."

The company provided its Supplier Sustainability Standards, Integrity Code, and Annual Sustainability Report.

HP Inc

1501 Page Mill Rd
Palo Alto,
CA 94304-1126
United States

Annual turnover:

US\$103,355,000,000⁷ for
fiscal year ended 31 October
2015

Annual net profit:

US\$4,554,000,000⁸ for fiscal
year ended 31 October 2015

Does cobalt in the company's products originate in the DRC?

Based on the information provided by Amnesty International, HP is "conducting an investigation with our suppliers. As of now we have not found any linkage between our products and the DRC mine. If a linkage is found, we will take steps to address the risks you have raised."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company does not refer to Huayou Cobalt or name any specific suppliers.

Details of the company's human rights policies and due diligence measures:

"We expect our suppliers to conduct their worldwide operations in a socially and environmentally responsible manner pursuant to HP's Supply Chain Social and Environmental Responsibility Policy and consistent with the UN Guiding Principles on Business and Human Rights."

"We pride ourselves on being an ethical company – one where employees are proud to work and a company with which customers, business partners and suppliers want to do business. To that end, we are continuing our efforts to communicate our high standards for suppliers through HP's Supplier Code of Conduct (which prohibits forced, child and prison labor), our Global Human Rights Policy, the California Transparency in Supply Chains Disclosure, and our specialized standards to address unique risks to student and dispatch workers as well as foreign migrant workers in our supply chain."

"As an EICC member, we also participate in the identification and sharing of leading practices, and we engage in other collaborative alliances with Verité, Social Accountability International (SAI), the Global Business Initiative on Human Rights (GBI), among others, to exchange information on issues and coordinate on ways to best protect workers in our supply chain."

Huawei

Huawei Industrial Park,
Yuting Road Chenghua
Industrial Area,
Chenghai Dist.
SHANTOU, GNG 515800
China

Annual turnover:
US\$46,515,000,000⁹ for fiscal
year ended 31 December 2014

Annual net profit:
US\$4,498,000,000¹⁰ for fiscal
year ended 31 December 2014

Does cobalt in the company's products originate in the DRC?

No response provided.

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company denies being part of Huayou's cobalt supply chain.

Details: "Huawei ... contacted the two suppliers, Tianjin Lishen and Coslight, to conduct a review and investigation. Upon investigation by Tianjin Lishen and Coslight, the two suppliers and their upstream suppliers have all confirmed that the cathode materials supplied hadn't used raw materials from Huayou Cobalt, and that the issues mentioned in your [Amnesty International's] letter, such as human rights abuses, haven't been found in their cathode materials supply chain."

Details of the company's human rights policies and due diligence measures:

"As a member of the UN Global Compact and GeSI, Huawei has always put global social responsibility as our goal and conducted ethical purchasing. We clearly prohibit the behaviours mentioned in your letter, such as the use of child labour and abuse of labour rights, and demand all our suppliers to comply. Huawei has now established comprehensive and sound supplier accreditation and management systems to ensure that the suppliers meet sustainability requirements. Based on the Electronics Industry Code of Conduct (EICC), Huawei has developed a sustainability agreement for suppliers covering five parts including labour standards, health and safety, environmental protection, business ethics and management systems. It demands suppliers to comply with the laws and regulations in their host countries or areas as well as international standards, and bear social and environmental responsibilities. Huawei conducts comprehensive and systematic accreditation on all newly introduced suppliers, to evaluate their capacities and levels of compliance with laws, regulations and the sustainability agreement. Huawei asks accredited suppliers to develop plans for continuous improvement and conduct regular internal reviews according to the requirements of the sustainability agreement."

"Huawei has progressively imposed the prohibition on the purchase of tantalum, tin and tungsten among suppliers since 2002. In addition, the Company also actively participates in GESI/CFSI (Conflict-Free Sourcing Initiative) to address the issue of conflict minerals with the whole industry."

The company provided its 2014 Sustainability Report and supplier's investigation statement.

Lenovo (Motorola Mobility is a wholly-owned subsidiary of Lenovo)

No. 6 Shangdi West Road,
Haidian District
BEIJING, BEJ 100085
China

Annual turnover:
Lenovo's revenue was
US\$46,295,593,000 for year
ending 31 March 2015¹¹

Annual net profit:
US\$836,603,000 for year
ending 31 March 2015¹²

Does cobalt in the company's products originate in the DRC?

Lenovo does not directly address the question, but states that it has not "...previously detected human rights abuses in the cobalt supply chain."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

"Tianjin Lishen is not currently in the direct supply chain for products manufactured by Lenovo or Motorola. CDM and Huayou Cobalt have not been otherwise identified as cobalt processors in either Lenovo's or Motorola's supply chain...However, we are aware of two third-party trademark licensees that source batteries from Tianjin Lishen for products that they manufacture to be sold under the Motorola brand. We will work with Tianjin Lishen and trademark licensees to investigate the concerns raised...If we verify that these concerns are valid, Lenovo will instruct our licensees to discontinue their use of Tianjin Lishen unless or until [it] can demonstrate compliance to Lenovo's requirements."

Details of the company's human rights policies and due diligence measures:

"Our agreements with trademark licensees require them to abide by our Supplier Code of Conduct, which prohibits them from using suppliers that utilise child labour. Lenovo has policies and practices in place to identify and prevent human rights violations in the supply chain for Lenovo and Motorola products. Some key practices include:

- As a member of the EICC, we have adopted the EICC Code of Conduct in the operation of our internal and external supply chain. Specifically, we require our suppliers to sign formal agreements that require them to comply with the EICC Code of Conduct, provide annual formal self-assessments reported through EICC tools, conduct biennial audits with EICC approved third party auditors, and provide Lenovo with the resulting audit reports and corrective action plans. The EICC Code itself and our contracts require that suppliers flow-down these requirements through all tiers of the supply chain, including refiners and smelters. A significant percentage of Lenovo's total procurement spend comes from suppliers who are themselves EICC members and conduct similar operations as a requirement of their EICC membership.

- We participate in the EICC Conflict Free Smelter Initiative (CFSI) for due diligence on 3TG in the DRC and surrounding countries... While the CFSI and hundreds of its member companies currently concentrate on processes related to 3TG in the DRC, Lenovo will continue to support and participate in EICC efforts to develop new programs that address further risks with other minerals and commodities."

Company also states that it publishes an annual Sustainability Report, is a signatory to the UN Global Compact, and posts its commitment to eliminating inappropriate labour practices on its website.

Microsoft Corporation

One Microsoft Way
Redmond,
WA 98052-6399
United States of America

Annual turnover:

US\$93,580,000,000¹³ for
fiscal year ended 30 June 2015

Annual net profit:

US\$12,193,000,000¹⁴ for
fiscal year ended 30 June 2015

Does cobalt in the company's products originate in the DRC?

Company is unable to say "with absolute assurance" whether or not cobalt in its products originates in Katanga in the DRC.

Details: "Tracing metals such as cobalt up through multiple layers of our supply chain is extremely complex...Tracking the origin of the cobalt metal in [the different compounds used in Microsoft products] to the precise mining area is extremely challenging. Due to our supply chain complexity and the in-region co-mingling of materials, we are unable to say with absolute assurance that any or none of our cobalt sources can be traced to ore mined in the Katanga region. To create such a tracing mechanism would require a large degree of vertical and cross-industry collaboration."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

"We have not traced the cobalt used in Microsoft products through our supply chain to the smelter level due to the complexity and resources required."

"We can confirm that we currently contract with [Tianjin Lishen] to provide a very limited number of batteries for a product development project. To our knowledge, Lishen batteries are not used in any product currently sold by Microsoft. Due to the small volumes used, Tianjin Lishen is not listed on Microsoft Top 100 Hardware Supplier List... We took immediate action by asking Tianjin Lishen to remove this reference [on its website] to Microsoft as it is a misuse of the Microsoft name and implies incorrectly that we have a major contractual relationship. Lishen has complied with Microsoft's request."

Details of the company's human rights policies and due diligence measures:**Child labour:**

"Microsoft does not tolerate the use of child, involuntary or forced labour in our supply chain...To ensure our policies are being followed, we require our suppliers to incorporate our code of conduct and related requirements into their contracts with Microsoft. We train our suppliers and auditors to our specifications and also directly assess our Tier 1 and strategic component suppliers and monitor for such abuses. To eliminate the risk of underage labor, Microsoft does not allow persons under the age of 18 to work on lines dedicated to Microsoft products. We also require our Tier 1 suppliers to monitor further upstream to ensure that laws regarding underage workers are respected and enforced."

"Underage labor has become a rarity in our contracted supply chain due to Microsoft's stringent practices. Were an underage worker to be identified, related work would cease immediately. The factory would be required to pay the underage worker wages through his/her majority and safely escort the worker home."

"In general, actions for non-compliance with our requirements include at a minimum, corrective action plans and follow up verification audits. Further actions may include increased audit frequency, additional assessment, remedial training, certification and termination of the business relationship. In most cases, we are able to influence suppliers to put needed measures in place."

Mineral supply chain:

"Microsoft's "Responsible Sourcing of Raw Materials" Policy extends our Supplier Code of Conduct to the furthest reaches of our upstream supply chain in support of human rights, labor, health and safety, environmental protection, and business ethics. This commitment is global in scope and applies to all substances used in our products, unbounded by materials or location. Our extended strategy for responsible sourcing of raw materials focuses on a combination of building cross-industry sector capability, supporting electronics industry efforts, and working with in-region expert NGOs."

"Microsoft has not identified human rights abuses in its upstream supply chain related to cobalt extraction."

Samsung Electronics Co., Ltd.

129, Samsung-ro,
Yeongtong-gu,
Suwon-si,
Gyeonggi-do,
South Korea

Annual turnover:

Korean Won
206,205,987,000,000¹⁵ for
fiscal year ended 31 December
2014

(US\$188,829,000,000)

Annual net profit:

Korean Won
23,394,358,000,000¹⁷ for
fiscal year ended 31 December
2014

(US\$21,423,000,000)

Does cobalt in the company's products originate in the DRC?

No response provided.

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company states that neither CDM nor Huayou Cobalt are registered suppliers and thus Samsung does "not carry out any business transactions with both companies". However, it does not state whether they are in their supply chain. Company confirms that Samsung SDI is a supplier of Samsung Electronics, and that "we have requested additional information regarding CDM and Huayou Cobalt."

Details of the company's human rights policies and due diligence measures:

Child labour:

"Samsung maintains "a zero tolerance policy on child labor"...Samsung has taken steps and established strict policies to prevent child labor in our facilities and supplier companies. Samsung established [a] dedicated team to continuously monitor, assess and improve every aspect of working conditions of supplier facilities to meet our own high standards. Since 2012, we have instituted a supplier code of conduct based on Electronic Industry Citizenship Coalition (EICC) guidelines and enforced these policies through the annual self-assessment, on-site audits and 3rd party audits, which is carried out in forms of both regular and unannounced. If a violation of child labour is found, contracts with suppliers who use child labor will be immediately terminated."

Mineral supply chain:

"To ensure our sub-suppliers are also committed to our high standards, Samsung also mandate all of our registered suppliers to complete the annual self-assessment, which is based on EICC checklist. During the annual self-assessment, suppliers are required to submit information about environment, social and health compliance status of their suppliers (or Samsungs's sub-suppliers)."

Human Rights Policy:

"Samsung has developed [a] human rights policy aligned with the UN Guiding Principles on Business and Human Rights, OECD guidelines for multinational enterprises, the UN convention on the Rights of the Child, and the laws of the countries in which we operate...In the future, we plan to publish our key findings from Human Rights Impact Assessment of our business operations across the globe."

Company provided its Child Labor Prohibition Policy in China and its Business Conduct Guidelines.

Samsung SDI

150-20 Gongse-ro,
Giheung-gu,
Yongin-si,
Gyeonggi-do,
South Korea

Annual turnover:

Korean Won
5,474,221,641,000¹⁹ for year
ended 31 December 2014

(US\$5,012,920,000²⁰)

Annual net profit:

Korean Won
-80,314,437,000²¹ for year
ended 31 December 2014

(US\$-73,547,000²²)

Does cobalt in the company's products originate in the DRC?

Company states that it is "impossible for us to determine whether the cobalt supplied to Samsung SDI comes from DRC Katanga's mines."

Details:

"The corporate policy of Samsung SDI prohibits the use of minerals originated from conflict-affected areas such as the DRC. Thus, the company conducts yearly investigations on our suppliers about the use of concerned minerals and examines the refiners of 3TG, banned under US SEC's conflict minerals rules. Adding to that, the company investigated the country of origin of cobalt which is not on the current list of conflict minerals. However, in reality, it is very hard to trace the source of the mineral due to suppliers' nondisclosure of information and the complexity of the supply chains."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

"Samsung SDI does not have any direct transactions [with CDM or Huayou Cobalt] and the two companies are not in Samsung SDI's supply chain." L&F Material Co. "supplies Samsung SDI with cathode materials for batteries. However, the source material of cathode materials that L&F Material Co supplies to Samsung SDI comes from a Japanese firm not from Huayou... Except for L&F Materials Co, Samsung SDI does not have any business relationship with other companies mentioned in your email."

Details of the company's human rights policies and due diligence measures:**Child labour:**

"Samsung SDI strictly deals with any major violations of child labor and human right abuses across the entire plants and suppliers around the globe. Up until now, there has been no case of child labor violations reported or detected from Samsungs SDI's plants or suppliers."

Samsung SDI's suppliers of source material of cathode materials "are required to have an approval from Samsung SDI in its product development stage, which allows Samsung SDI to keep track of the original supplier of concerned materials... Samsung SDI operates the S-Partner Certification Program as a way to diagnose and improve CSR issues across its supply chain. For all suppliers, Samsung SDI conducts written evaluations and on-site inspections in areas such as human right, labor, ethics, environment, and health and safety on a two-year basis and awards them with certification. In 2014, the company selected mandatory requirements, including child labour ... and informed its suppliers of the rule that their transactions with Samsung SDI may be terminated if they failed to meet the requirements. In addition... Samsung SDI has required suppliers to sign a written pledge to ban child labor and provided training on compliance for the employees of Samsung SDI's suppliers. The evaluation items of the S-Partner Certification Program satisfy the code of conduct of EICC."

Company referenced its Sustainability Report, stating that through this report Samsung SDI discloses "the result of CSR due diligence on its suppliers in areas of human rights, labor, health and safety, and ethics."

Sony

1-7-1 Konan
Tokyo, -- 108-0075
Japan

Annual turnover:

Yen 8,215,880,000,000²³ for
fiscal year ended 31 March
2015

(US\$68,485,397,000²⁴)

Annual net profit:

Yen -125,980,000,000²⁵ for
fiscal year ended 31 March
2015

(US\$-1.1 bn²⁶)

Does cobalt in the company's products originate in the DRC?

Company "takes this issue seriously" and has been conducting a fact finding process, and "so far, we could not find obvious results that our products contain cobalt originated from Katanga in the DRC. We will continue the assessment and pay close attention to this matter."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Question not directly addressed by the company

Details of the company's human rights policies and due diligence measures:

"It is Sony Group policy to comply with all applicable laws and regulations of countries and regions in which we operate and to conduct our business activities in an honest and ethical manner. Supply chain management is one of our focus areas, and we have implemented the 'Sony Supplier Code of Conduct' for suppliers working with Sony Group. We are working with the suppliers to address issues related to human rights and labor conditions at the production sites, as well as in the procurement of minerals and other raw materials. Our policy and due diligence practices on responsible sourcing are described in our CSR Report."

"As such, Sony has a strong commitment to ethical business conduct and we have a stringent policy and management system to minimize the risk of child labor throughout our supply chain."

Tianjin Lishen Battery Joint-Stock Co., Ltd.

No.6 Lanyuan Road,
Huayuan Hi-tech Industry Park,
Tianjin, China

Annual turnover:

CNY 2,484,651,800²⁷ for year ended 31 December 2014

(US\$400,319,000²⁸)

Annual net profit:

CNY -80,316,800²⁹ for year ended 31 December 2014

(US\$-12,940,000³⁰)

Does cobalt in the company's products originate in the DRC?

No response provided.

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company denies being part of Huayou's cobalt supply chain.

"Our current cathode materials supplier, Tianjin Bamo Technology Co., Ltd, has no business dealings with Zhejiang Huayou Cobalt Co., Ltd. The cathode materials supplied to us by Toda Hunan Shanshan New Material Co., Ltd hasn't used raw materials from Huayou Cobalt...We have confirmed in writing with our cathode materials suppliers that the cathode materials we currently use have no involvement in any violation of human rights, labour rights and environmental protection."

Details of the company's human rights policies and due diligence measures:

"We have signed purchasing agreements with our main raw material suppliers. The agreements clearly demand that the products supplied to us must comply with requirements concerning human rights, labour rights and environmental protection."

Vodafone Group plc

Vodafone House
The Connection
Newbury
Berkshire
RG14 2FN

Annual turnover:

£42,227,000,000³¹ for year ended 31 March 2015

(US\$65,816,769,000³²)

Annual net profit:

£5,917,000,000³³ for year ended 31 March 2015

(US\$9,222,484,000³⁴)

Does cobalt in the company's products originate in the DRC?

Company is "unaware as to whether or not cobalt in our products originates in Katanga in the DRC."

Details:

"Vodafone does not directly purchase raw minerals, ores or metals and we do not manufacture electronic products. However, we do purchase electronic products from suppliers and, in some cases, have influence over the manufacturing and design of products."

"Both the smelters and the mines from which metals such as cobalt are originally sourced are several steps away from Vodafone in the supply chain."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company is "unaware as to whether...CDM and Huayou Cobalt process cobalt within our supply chains."

Details:

"We can confirm that...Tianjin Lishen Battery Joint Stock Company Ltd is not a direct supplier to Vodafone and therefore we do not have a direct contractual relationship with them. For original design manufacturers (ODM) which are branded Vodafone and where we have direct relationships, we do not allow the use of Chinese battery suppliers and Tianjin Lishen Battery Joint Stock Company Ltd is not used in our products. We are not aware if original equipment manufacturers (OEM), such as Apple, Samsung which are named customers on Tianjin Lishen Battery Joint Stock Company Ltd website use cobalt from these mines as we do not have influence over the design or manufacture."

"We will make contact with all our direct suppliers who have a direct relationship with Tianjin Lishen Battery Joint Stock Company to make them aware of the issues you have raised, ask for their response and set out Vodafone's expectations."

Details of the company's human rights policies and due diligence measures:

Company states that the standards it demands of its suppliers are set out in its Code of Ethical Purchasing which is based on international standards and which "strictly prohibits child labour." Company states that: "These standards are integrated right from the start of our engagement with suppliers, in the initial qualification process. We then conduct regular site assessments to ensure compliance and if suppliers consistently fail to meet our standards, we will not work with them. To target improvements further down the supply chain, we work with our suppliers to implement similar standards with their suppliers." Company expects suppliers to "be able to source validated conflict-free minerals from the DRC and we support industry initiatives such as the Conflict-Free Sourcing Initiative of which we are a member."

Company referenced its Conflict Minerals Policy Standard. It also provided its second Conflict Minerals report, submitted in accordance with US reporting requirements, stating that it is "important to note that cobalt is not one of the minerals which is included in the Conflict Minerals report and therefore [not] subject to the same level of due diligence as the other minerals noted above [tantalum, tin, tungsten or gold]."

Volkswagen

Briefach 1998
D-38436 Wolfsburg
Germany

Annual turnover:

€202,458,000,000³⁵ for year
ended 31 December 2014

(US\$245,181,352,000³⁶)

Annual net profit:

€11,068,000,000³⁷ for year
ended 31 December 2014

(US\$13,403,606,000³⁸)

Does cobalt in the company's products originate in the DRC?

"To our best knowledge, the cobalt in our batteries does not originate from the DRC."

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

"To our best knowledge CDM or Huayou Cobalt is not part of our supply chain."

Company confirmed that after analysing its business relationships, it did not have an "active" relationship with BAK, but it did with Tianjin Lishen. "We contacted our supplier regarding the use of cobalt in lithium batteries and the respective supply chain. The supply chain you mapped out in your letter was refused by our supplier."

Details of the company's human rights policies and due diligence measures:

"To our best knowledge we had no human rights abuses in our cobalt supply chains in the past."

"Our supplier relations are based on the "Volkswagen Group requirements regarding sustainability in its relationships with business partners (Code of Conduct for Business Partners)", They formulate our expectations for our business partners' conduct with regard to central environmental and social standards....Child labour is prohibited specifically."

"In order to prevent human rights abuses caused by the mining of raw materials the Volkswagen Group disclosed the "Volkswagen Conflict Mineral Policy" this year. Volkswagen along with other companies and trade associations welcomes the proposition of improving transparency in the raw materials sector, which is of great importance to the economic development of producing countries. Fair and non-discriminatory access to raw materials is also required."

"In general the Volkswagen Group uses an internal system for sustainable supply chain management. It provides supplier-specific sustainability information, enabling the comprehensive analysis of suppliers. If there is reason to suspect that tier 1 suppliers or their sub-suppliers are failing to comply with our sustainability requirements, we ask the party concerned for a written statement using a standardized report (6D Report). Based on the six points in the report, they can describe the status quo and any remedial measures...If the answers prove unsatisfactory, we take further appropriate steps, such as the examination of documents, visits to the supplier's premises, 3rd party CSR audits or other customized supplier development activities...If deviations are revealed, specific improvement measures are agreed with such respective suppliers and followed up by the internal Sustainability in Supplier Relations Network."

"Human rights due diligence policies and practices are annually disclosed in the Volkswagen Sustainability Report. In the Chapter "Supplier Management" Volkswagen informs the public about risk management, sustainability requirement, qualification, monitoring and 3rd party CSR audits of suppliers. Furthermore Volkswagen discloses ad-hoc cases distinguished between geographical distribution, context and type of suppliers. In 2014 for example, 23 suppliers were not compliant with our social standards and in two cases sub-suppliers were involved. Volkswagen also includes sustainability issues in the Volkswagen Annual Report." The company also provided its Internal Code of Conduct and "Sustainability in Supplier Relations" brochure.

The following companies were contacted, but did not respond:

- **ATL**
- **BAK**
- **BYD**
- **Dell**

TABLE 2: Companies potentially buying from Tianjin Bamo as part of Huayou Cobalt's supply chain

Company	
<p>Tianjin Bamo Science and Technology Ltd. Tianjin Binhai High-tech Industrial Zone (outside the ring), No. 8 Haitai Road</p> <p>Annual turnover: CNY 610,221,400³⁹ as of year-end 2013 (US\$100,797,000⁴⁰)</p> <p>Annual net profit: CNY 22,108,900⁴¹ as of year-end 2013 (US\$3,652,000⁴²)</p>	<p>Does cobalt in the company's products originate in the DRC? No response provided.</p> <p>Do CDM or Huayou Cobalt process cobalt within the company's supply chain? Tianjin Bamo replied via two of its clients, Coslight and Tianjin Lishen, that it has had "no business dealings" with Huayou Cobalt.</p> <p>Tianjin Bamo states that it purchased lithium cobalt oxide from Jiangsu Cobalt Nickel Metal Co., Ltd and Lanzhou Jinchuan Advanced Materials Technology Co., Ltd.</p> <p>Details of the company's human rights policies and due diligence measures: Coslight stated that Tianjin Bamo has "signed letters of undertaking with its upstream suppliers prohibiting the use of conflict minerals and obliging them to protect human rights, labour rights and the environment."</p>
<p>Coslight No. 68, Dianlan Street, Xuefu Road, Nangang District, Harbin, China</p> <p>Annual turnover: CNY 3,530,664,000⁴³ for year ended 31 December 2014 (US\$568,850,000⁴⁴) (N.B.: Li-ion batteries account for 52.8% of revenues)</p> <p>Annual net profit: CNY 28,333,000⁴⁵ for year ended 31 December 2014 (US\$4,565,000⁴⁶)</p>	<p>Does cobalt in the company's products originate in the DRC? No response provided.</p> <p>Do CDM or Huayou Cobalt process cobalt within the company's supply chain? Coslight replied via its client Huawei, and declared that "the products supplied to Huawei don't contain any conflict minerals or involve in any human rights abuse."</p> <p>Company confirmed that its raw materials are supplied by Tianjin Bamo, but that an investigation shows that Tianjin Bamo have had "no business dealings" with Huayou Cobalt. The investigation also "verified and confirmed with existing secondary suppliers that there are no issues of the violation of human rights and labour rights as well as environment protection with the currently used lithium cobalt oxide."</p> <p>Details of the company's human rights policies and due diligence measures: Coslight has "signed an agreement with Tianjin Bamo Technology Co., Ltd strictly prohibiting the use of conflict minerals."</p>

Inventec

(owner of mobile phone manufacturer OKWAP)

Inventec Appliances
No.66, Hougang St.,
Shilin Dist.,
Taipei City 11170,
Taiwan

Annual turnover:

TWD 435,599,968,000⁴⁷ for
year ended 31 December 2014

(US\$13,779,992,000⁴⁸)

Annual net profit:

TWD 6,665,561,000⁴⁹ for year
ended 31 December 2014

(US\$210,862,000⁵⁰)

Does cobalt in the company's products originate in the DRC?

No response provided.

Do CDM or Huayou Cobalt process cobalt within the company's supply chain?

Company "has learned internally that OKWAP hasn't purchased from Coslight Technology International Group."

Details of the company's human rights policies and due diligence measures:

"In the procurement contracts for electronic components, we clearly demand suppliers in all regions to pledge to fully comply with all local laws and regulations; and guarantee that employees' health and work safety fully complies with local governments' relevant regulations. We also ask them to promise not to use child labour and forced labour, and treat their labour:

- (1) in accordance with the provisions of the International Labour Organisation;
- (2) without any discriminatory rules and regimes concerning labour rights; and
- (3) in compliance with local laws regarding pay schemes and arrangements of working hours."

"We have asked the suppliers to sign and comply with the Code of Ethics for Inventec's Suppliers (Code of Ethics). This Code of Ethics has been developed in accordance with the Universal Declaration of Human Rights, International Labour Organisation Conventions, EICC Electronic Industry Code of Conduct, and other human rights and labour rights provisions and their spirits. Inventec expects suppliers to strictly comply with this Code of Ethics, especially the provisions prohibiting child labour and forced labour."

For responses by Huawei, and Tianjin Lishen and its potential buyers, see table 1.

The following companies were contacted, but did not respond:

- **Ahong**
- **ZTE**
- **BYD**

TABLE 3: Companies potentially buying from L & F Materials as part of Huayou Cobalt's supply chain

Company	
<p>LG Chem Ltd LG Twin Towers, 128, Yeoui-daero, Yeongdeungpo-gu, Seoul</p> <p>Annual turnover: Korean Won 22,577,830,000,000⁵¹ for year ended 31 December 2014</p> <p>(US\$20,675,244,000⁵²)</p> <p>Annual net profit: Korean Won 854,025,000,000⁵³ for year ended 31 December 2014 (U \$782,058,000⁵⁴)</p>	<p><i>Does cobalt in the company's products originate in the DRC?</i> Company confirmed that cobalt from Katanga is in its product.</p> <p>Company stated that "We requested our suppliers of cathode materials to confirm whether they used cobalt originating in Katanga in the DRC, and one of our 2nd-tier suppliers, Zhejiang Huayou Cobalt Co., Ltd. ("Huayou Cobalt"), has confirmed that their product contains cobalt originating in Katanga in the DRC."</p> <p>"We are discussing whether there is a need for us to conduct our own inspection on the cobalt mining areas in Katanga, together with a 3rd-party inspector. If the risk of human rights violations is confirmed to be very high and serious through the inspection, we will consider taking a wide range of effective actions to stop the violations, such as suspending or terminating business with those suppliers who procure cobalt from such mines."</p> <p><i>Do CDM or Huayou Cobalt process cobalt within the company's supply chain?</i> Company confirmed that Huayou Cobalt is one of its suppliers of cobalt products.</p> <p>Details: "Huayou Cobalt which supplies cobalt oxide to one of our cathode materials suppliers, L&F Materials, purchases cobalt concentrate and crude cobalt hydroxide from CDM."</p> <p>LG Chem asked L&F Materials to "contact Huayou Cobalt and confirm the facts and let them know the steps they are taking to prevent further problems." The company provided Huayou Cobalt's response.</p> <p><i>Details of the company's human rights policies and due diligence measures:</i> "LG Chem is actively participating in the global initiative on prohibiting the use of conflict minerals (3TG)... We have two policies in place to control the components of our products ... the Guideline for the Eco-Friendly SCM which presents to our suppliers the requirements on composition of materials and products supplied to LG Chem. The conflict minerals have been added to the list of Prohibited Substances in the Policy and Guideline since 2013."</p> <p>"In order to make sure that our suppliers comply with our policy, LG Chem has established a process to control the composition of materials from the procurement stage. Every supplier of materials is required to fill out and submit the composition survey form to confirm whether their product contains any of the prohibited ingredients including conflict minerals. If there exists one, LG Chem requires the supplier to provide the smelter information and a confirmation to guarantee that the mineral is sourced from one of the CFS (Conflict-Free Smelters). Purchase orders cannot be placed without going through this process..."</p> <p>"We will continue to monitor and update our policy on the use of minerals and take actions to restrict or prohibit the use of those which are legally restricted in any parts of the world and confirmed to cause severe damage to social values such as human rights. The use of such minerals in their supply chain will be identified and strictly managed from the procurement stage just like how the conflict minerals are currently being managed."</p> <p>"We have been drafting a Supplier Code of Conduct as a way of encouraging and requiring their suppliers to meet the global standards on the comprehensive social responsibility. The Code, effective starting from 2016, specifically includes a provision on prohibiting the use of materials which have been obtained by illegal or unethical measures and requires the suppliers to perform due diligence practices to guarantee that they are compliant with the Code if necessary. Such requirements must also be demanded of their own suppliers so that all our upstream suppliers are managed under the same standards."</p> <p>"We currently only publicly disclose our approach on prohibiting the use of conflict minerals on our website and Sustainability Report. As we are in the course of establishing a system to evaluate our suppliers on their CSR management status, we will disclose the process and results of the evaluation on the Sustainability Report once the system has been set in place."</p> <p>The company also provided the following documents: Eco-friendly Product Development Policy; Guideline for Eco-Friendly SCM; LG4 Conflict Mineral Committee; Guarantees from Suppliers; ERP System for Substance Management; Supplier Training Material.</p>

For responses by Apple, Samsung SDI, Samsung Electronics, see table 1.

The following companies were contacted, but did not respond:

- **L&F Material**
- **LG (provided answer through LG Chem)**

Endnotes

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HUMAN RIGHTS ABUSES IN THE DEMOCRATIC REPUBLIC OF THE CONGO POWER THE GLOBAL TRADE IN COBALT

People around the world increasingly rely on rechargeable batteries to power their mobile phones, tablets, laptop computers, cameras and other portable electronic devices. Cobalt is a key component in lithium-ion rechargeable batteries. This report documents the hazardous conditions in which artisanal miners mine cobalt in the Democratic Republic of the Congo (DRC), where more than half of the world’s total supply of cobalt comes from.

Using basic hand tools, artisanal miners dig out rocks from tunnels deep underground, and accidents are common. Many children are involved in artisanal mining. Despite the serious and potentially fatal health effects of prolonged exposure to cobalt, adult and child miners work with cobalt for long periods without even the most basic protective equipment.

This report is the first comprehensive account of how cobalt from the DRC’s artisanal mines enters the supply chain of many of the world’s leading brands. It highlights the failure of these companies to put in place due diligence measures to identify where the cobalt in their products comes from and the conditions in which it is extracted and traded.

The government of the DRC must extend and enforce labour and safety protections for all artisanal miners and create more authorized artisanal mining areas. The government, along with companies involved, should ensure that children are removed from hazardous working conditions and address the children’s educational and other needs. All governments should enact and enforce laws requiring corporate due diligence and public disclosure in relation to cobalt and other minerals.

